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THE NAVAL BLOCKADE: A STUDY OF FACTORS
NECESSARY FOR EFFECTIVE UTILIZATION

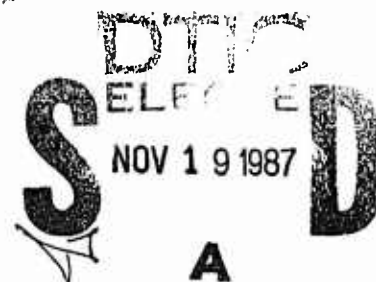
A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

DAVID T. CUNNINGHAM, LCDR, USN
B.S., Kansas State University, 1975

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South during the American Civil War and the blockade of Cuba during the Cuban Missile Crisis.

The study identifies 22 characteristics which were common to most blockades. The study also reveals 23 secondary characteristics which were also found to contribute to the success of blockades. Two factors were found to be utilized in virtually all successful blockades. The first of these two characteristics was the use of superior sea power by the blockading forces. The second of these characteristics was the use of operations ashore in conjunction with the blockade. These operations took the form of an invasion by ground forces, air strike, land campaign or the imminent threat that one of these operations might be used successfully. The study also includes a review of potential future trends in operations.

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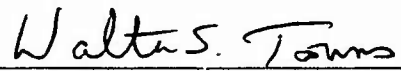
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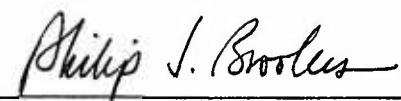
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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE NAVAL BLOCKADE: A STUDY OF FACTORS NECESSARY FOR EFFECTIVE UTILIZATION. by Lieutenant Commander David T. Cunningham, USN, 131 pages.

The 1986 Joint Staff Officer's Guide, AFCS Pub 1, identifies seven military mission options available to national leaders as possible solutions to deal with international problems. Of these seven options, two specifically involve the use of a naval blockade or quarantine. This study uses historical analysis to derive factors which merit consideration by political and military planners contemplating the employment of a naval blockade as a possible option. The study identifies characteristics which have contributed to the success of past naval blockades and focuses on characteristics that have been common to most successful applications of the naval blockade.

The study analyzes 41 blockades or periods of blockade occurring between 425 B.C. and 1973. The study reviews these blockades in three distinct time periods; prior to 1600, during the age of sail from 1600 to 1860, and during the age of iron and steel from 1866 to 1973. Additionally, two other blockades are reviewed in detail. These include the blockade of the South during the American Civil War and the blockade of Cuba during the Cuban Missile Crisis.

The study identifies 22 characteristics which were common to most blockades. The study also reveals 23 secondary characteristics which were also found to contribute to the success of blockades. Two factors were found to be utilized in virtually all successful blockades. The first of these two characteristics was the use of superior sea power by the blockading forces. The second of these characteristics was the use of operations ashore in conjunction with the blockade. These operations took the form of an invasion by ground forces, air strike, land campaign or the imminent threat that one of these operations might be used successfully. The study also includes a review of potential future trends in operations.



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CHAPTER 1

INTRODUCTION

PURPOSE

The naval blockade is a policy option often considered by the United States in dealing with crisis situations that challenge our national interests. It is also considered as a potential tool for conducting or assisting wartime operations by military planners. Both of these considerations call for a set of factors to be used to assist political and military leaders to determine whether a naval blockade is likely to succeed for a given situation.

RESEARCH QUESTION

The purpose of this study is to determine, by analyzing past blockades, those factors or characteristics that should be present for a naval blockade to have a reasonable chance for success. This study accomplishes this by answering the question "What characteristics are necessary for a successful execution of a naval blockade?" In answering this question, the key factors which lead to a blockade failure are also discussed.

BACKGROUND

A naval blockade is used to reduce an enemy's will and ability to fight, defend itself or continue with a certain course of action. It is conducted by cutting off or reducing the commerce, supplies and communications of an enemy nation or an ally of an enemy nation. The naval blockade has been used as a tool by nations attempting to exert influence over other nations to obtain national objectives.

The naval blockade has played an important role not only in maritime history, but in the course of world history as well. The first recorded use of a naval blockade occurred in 425 B.C. at the island of Sphacteria. In that year, the Athenians conducted a 72 day blockade of the island and forced the Spartan garrison on the island to surrender.(1) The impact of the naval blockade has continued to play an important role in most major conflicts since the fall of Sphacteria. An example of this was the British blockade of France during the Seven Years War which eventually severed French communications and support to her colonies.(2) Additionally, the extensive blockade by the Union fleet during the American Civil War devastated the south and hastened the end of that conflict.(3) Similarly, the blockade/quarantine of Cuba in 1962 may have been the catalyst that prompted the Soviet Union to build an ocean going, blue water, surface Navy capable of roles beyond

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1) Blockade: A belligerent operation intended to cut off an enemy's communications and commerce and to isolate a specific location or region.(7) It is normally conducted by preventing vessels or aircraft of all states from entering or leaving specified areas which are under the occupation or control of an enemy.

2) Pacific Blockade: A blockade utilized as a means of settling a dispute by a coercive act short of war. A Pacific blockade is applied only to vessels or aircraft of the blockaded nation, by vessels or aircraft of the blockading nation or nations. This type of blockade does not include a declaration of war and does not include third party neutrals.(8)

3) Quarantine: A collective, peaceful method involving limited coercive measures of stopping the unreasonable movement of certain types of military weapons and associated material. A quarantine does not include a declaration of war and is designed to keep specific items from entering a specified nation or state.(9)

4) Belligerent: Any person or unit representing either the nation imposing the blockade or the nation against whom the blockade is imposed.

5) Contraband: Something that according to international law cannot be supplied to one belligerent except at risk of seizure and condemnation by the other.

6) Breach of Blockade: The passage of a vessel through the blockade. This also applies to a vessel

transiting to a neutral port or airfield serving as a point of transit to the blockade area.

7) Neutral Vessel: A ship or aircraft which is not owned or operated by any belligerents of the blockade.

8) Neutral Port: A port that is within or operated by a nation which does not directly support, supply or assist any belligerent nation in regard to the blockade being imposed.

9) Area of Blockade: Includes the ports, harbors, land mass, coastline, ocean area and airspace designated as the area of blockade in the blockade declaration. This also includes that area below the surface of the ocean that is declared as within the blockade area.

10) Defensive Blockade: A blockade that is imposed to keep enemy warships from leaving port. (10) This is also known as a Nelsonian blockade.

11) Offensive Blockade: A blockade that is imposed to prevent ships or contraband from entering a port.

SCOPE AND LIMITATIONS

This study addresses only those blockades which include or require participation by naval forces. Although the study reviews the characteristics of blockades, it does not focus on naval tactics. This study is limited by the lack of recent naval blockades. The last blockade in which the United States participated was the blockade of Cuba in 1962. The Indian blockade of Pakistan in December 1971 and the Egyptian blockade of the Straits of Bab el Mandeb in

October 1973 provide some insight into the legal aspects of blockades, but little else of significance.(11) The Falklands conflict, although not considered a blockade, does provide some insights on current weapons systems against ships operating in coastal waters similar to ships in a blockade.

SIGNIFICANCE OF THE STUDY

The use of naval blockades has had a significant impact on the history of the world. As the dependency on international trade increases, the naval blockade becomes an even more powerful tool. We live in a period of world conflict often referred to as an era of violent peace.(12) The 1986 Joint Service Officer's Guide, AFCS Pub 1, identifies seven military mission options available to national leaders as possible solutions for dealing with problems in this violent era. Of these seven options, two specifically deal with the use of a naval blockade or quarantine.(13) As this level of world conflict increases, the potential for using a blockade also grows. However, this era of violent peace also makes America's dealings in international relations and the world political community more delicate. As a result, the consequences of a blockade imposed in the wrong situation or an unsuccessful blockade also becomes more critical. Therefore, if our political leaders and military planners continue to view the blockade as a policy option, it is imperative that we know under what

circumstances the blockade can produce the desired results. A set of factors or characteristics to apply to a given situation can assist planners and decision makers to analyze whether a blockade is appropriate for the situation. These criteria can also assist in the determination of the likelihood of success of a blockade for that situation.

METHODOLOGY

This study uses historical analysis to derive factors which contributed to the success of past naval blockades. By reviewing these past blockades, the study identifies characteristics which were common to most successful blockades. The study also identifies secondary characteristics which were also found to contribute to the success of blockades.

ORGANIZATION

To avoid confusion, an explanation of the organization of the study is in order. Altogether there are seven chapters. The first chapter contains the introduction and review of literature. The majority of the study is broken down into major blockades or periods of blockades. The first major period includes all those blockades conducted during the age of galley warfare which occurred prior to 1600. These blockades are analyzed in Chapter Two.

Alfred T. Mahan felt there were two great periods of blockades. This is reflected in his essay "Blockade in Relation to Naval Strategy" in which he wrote:

The two great historical instances of blockades, so called, upon a really extensive scale and sustained with steady resolve through considerable periods of time, are the blockades of the French military ports by British fleets during the Seven Years War and the Napoleonic era, and the blockade of the coast of the southern Confederacy by the United States Navy during the Civil War, 1861-1865. (14)

Consequently, Chapters Three and Four cover the blockade in the age of sail and the Civil War respectively.

Chapter Five reviews blockades in the age of iron and steel from 1866 to the last recorded blockade which occurred in 1973. The blockade of Cuba during the Cuban Missile Crisis in 1962 is analyzed separately in Chapter Six. This is because it represents the last major blockade which occurred, and gives some insight into blockades which are conducted utilizing contemporary naval weapons and tactics. Chapter Seven contains the study's finding and conclusions.

REVIEW OF LITERATURE

No recent publications, which looked specifically at the utilization of naval blockades, were found to exist. However, numerous works were identified which contained information about various aspects of the naval blockade. These sources are listed in the bibliography.

Of these sources, Sea Power: A Naval History by E. B. Potter and A History of War at Sea by Helmut Pemsel provided the majority of the information concerning historical accounts of past blockades. In the area of law,

The Influence of Law on Sea Power by D. P. O'Connell was the primary source.

For the analysis of the Civil War blockade in Chapter Four, three primary sources were utilized in addition to those listed above. These three sources included War in the Modern World by Theodore Ropp, By Sea and By River: The Naval History of the Civil War by Bern Anderson and The Influence of Sea Power Upon History 1660-1783 by Alfred T. Mahan. In addition to The Influence of Sea Power Upon History 1660-1783, Mahan's article "Blockade in Relation to Naval Strategy" published in the Naval Institute Proceedings was also used throughout the study.

For the analysis of the Cuban Missile Crisis in Chapter Six, Essence of Decision: Explaining the Cuban Missile Crisis by Graham T. Allison, The Missile Crisis by Elie Abel, The Brink: Cuban Missile Crisis 1962 by David Detzer, and The Cuban Missile Crisis by Robert A. Divine were the primary source documents. Additionally, The Cuban Missile Crisis: International Crises and the Role of Law by Abram Chayes was the primary source of material for reviewing the legal aspects of the missile crisis.

ENDNOTES

- (1) Helmut Pemsel, A History of War at Sea (Annapolis, MD: Naval Institute Press, 1975), pp. 13-14.
- (2) Ibid., pp. 68-69.
- (3) Dale N. Hagen, Mahan's Influence on United States Naval Strategy Through 1918 (Carlisle Barracks, PA: Army War College, 1973), p. 15.
- (4) ADM James D. Watkins, USN, "The Maritime Strategy," U.S. Naval Institute Proceedings, Supplement to January 1986 Issue (Annapolis, MD: U.S. Naval Institute, 1986), p. 8.
- (5) William E. Livezey, Mahan on Sea Power (Norman, OK: University of Oklahoma Press, 1981), p. 235.
- (6) Ibid., p. 332.
- (7) Center for Land Warfare, Theater Planning and Operations for Low Intensity Conflict Environments (Carlisle Barracks, PA: U.S. Army War College, 1986), p. 31.
- (8) Gerhard Von Glahn, Law Among Nations (MacMillan Publishing Co., 1976), pp. 505-506.
- (9) Center for Land Warfare, p. 31.
- (10) Alfred T. Mahan, The Influence of Sea Power Upon History 1660-1783 (New York: Hill and Wang, 1957), p. 261.
- (11) D. P. O'Connell, The Influence of Law on Sea Power (Annapolis, MD: Naval Institute Press, 1975), p. 103.
- (12) Watkins, p. 5.
- (13) Armed Forces Staff College, Joint Staff Officer's Guide, 1986, AFCS Pub 1 (Washington, D.C.: Armed Forces Staff College, 1986), pp. 6-16.
- (14) Alfred T. Mahan, "Blockade in Relation to Naval Strategy," U.S. Naval Institute Proceedings, XXI, No. 4 (Annapolis, MD: U.S. Naval Institute, 1895), p. 854.

CHAPTER 2

NAVAL BLOCKADES PRIOR TO 1600

INTRODUCTION

Ships of war during ancient times primarily consisted of vessels designed to be rowed, with a sail used only for auxiliary propulsion. These galleys were typically crewed by 200 to 300 men who manned several rows of oars to provide propulsion. These vessels did not have keels, which made open ocean travel difficult and dangerous. However, these galleys were effective in coastal waters and were well suited for blockade operations of the time. (1,2)

THE COMBINATION OF A NAVAL BLOCKADE AND INVASION FORCES

One key element that is common to effective blockades prior to 1600 is that these blockades were conducted in conjunction with land forces. In these blockades, the cities or areas were sealed off by sea allowing forces ashore to seize the blockaded objective. An excellent example of this occurred in 31 B.C. when a fleet under Agrippa carried out a blockade of Anthony's army at Actium. In support of Agrippa's blockade, Octavian's army was successful in shutting off Anthony's army from the inland side. As a result, Anthony's army was weakened and

both Anthony and Cleopatra were able to escape with only a few ships. The remainder of Anthony's fleet was lost and his army was forced to surrender.(3)

Without an accompanying invasion by land forces to seize the weakened objective, the successful blockades during this era would not have been possible. Whether these forces traveled over land or were brought ashore from the sea did not appear to make a significant difference.

CONTROL OF BLOCKADE RUNNERS

Another key ingredient which led to Agrippa's successful blockade of Actium in 31 B.C. was the ability of his fleet to repel blockade runners.(4) In contrast, the Island of Rhodes was able to prevent an invasion by Demetrius in 305 B.C. due to the fact that blockade runners were able to evade the blockade and supply the island.(5) Similarly, in 249 B.C. the city of Drepanum was blockaded by a Roman squadron preparing to conduct an attack on the harbor. However, the Punic fleet was able to escape and was then able to defeat the Romans at sea.(6)

SUPERIOR SEA POWER AND THE USE OF A COMBINED FORCE

Another common factor found in effective blockades of this period was the superior sea power possessed by the blockader over that of the blockaded nation or city. In every instance that the blockader did not possess superior sea power, the blockade failed. An example of this occurred

in 1081 A.D. when ships of both Venetian and Byzantine squadrons were combined to outnumber and defeat the blockading Norman fleet. The combined fleet was then able to resupply the town of Durazzo.(7) Another example took place in 376 B.C. when a Spartan fleet of 60 ships conducted a blockade in the Saronian Gulf. This blockade was broken by the attack of a superior Athenian fleet of 80 ships.(8)

THE USE OF ARTIFICIAL OBSTACLES

Another factor effectively used in naval blockades of this era was the use of artificial obstacles to augment the blockade. This factor was demonstrated in the blockade of Syracuse in 413 B.C. by Gylippus. In this blockade, he was able to close the mouth of the harbor with a combination of ships and beams.(9)

These artificial obstacles restricted the passage of vessels and thus improved the effectiveness of the blockading ships. This concept later formed the basis for the development of the mine as we know it today.

THE EFFECT OF WEAPONS TECHNOLOGY

The development of new weapons often had a dramatic effect on naval engagements during this period. In 678 A.D., the first instance in which such an advancement made a strong impact on a naval blockade occurred. At that time, the Arabs under Yazid were conducting a blockade of Byzantine by land and by sea. This blockade was broken by the Greek fleet using a new weapon invented by a Syrian

named Kallinkos. This new weapon, known as "Greek Fire", was a primitive flame thrower which used a mixture of saltpetre, pitch, sulphur and oil. This mixture was ignited and pumped onto an enemy ship by the use of a form of siphon. Once ignited, this mixture could not be extinguished with water and the enemy ship would continue to burn. This weapon was also used effectively in 717 A.D. to break the Arab blockade of Constantinople.(10)

The Arab's inability to counteract this new form of weaponry resulted in the failure of both of these blockades. Consequently, this weapon could also have been used effectively by a blockader to gain superior sea power over an adversary.

THE EFFECT OF BLOCKADES OVER LONG PERIODS OF TIME

Alfred T. Mahan believed that an effective blockade, in time, could virtually strangle a nation.(11) This effect was first seen in 425 B.C. during the 72 day blockade of the island of Sphacteria. In this blockade the Athenians forced the surrender of the Spartan garrison on the island.(12) Another example occurred at Calais in 1347. In this blockade, the English conducted a year-long blockade and siege of that city which eventually led to its surrender.(13)

USE OF A DEFENSIVE BLOCKADE

This era also saw the first use of a defensive blockade to trap enemy ships in port. This blockade effectively weakened the enemy fleet to the point where it

no longer possessed significant combat power or it was forced to attempt escape. A close blockade would then allow the escaping fleet to be defeated in detail as it attempted to leave the harbor.

The attempt of the Athenians to break out of Syracuse Harbor in 413 B.C. provides an example of a fleet attempting to escape a defensive blockade. As the Athenian fleet tried to escape, they were heavily defeated by forces under the command of Gylippus. (14)

CHARACTERISTICS

There are seven factors concerning naval blockades that can be learned from this period prior to 1600. These are:

(1) Effective blockades had to be combined with an invasion or the threat of an invasion in addition to the blockade by sea.

(2) Blockade runners had to be controlled in an effective blockade.

(3) Superior sea power was vital to an effective blockade.

(4) Use of artificial obstacles added to the effectiveness of a blockade.

(5) The ability to use or react to dramatic developments in weapons technology had a significant impact on the effectiveness of blockades.

(6) Blockades conducted over long periods of time were effective in strangling or weakening an opponent.

(7) The use of a defensive blockade was effective in trapping enemy fleets.

CONCLUSIONS

As trade began to increase between nations in ancient times, the sea lanes between those nations began to take on increasing importance. Conversely, the ability to interdict those sea lanes also became more important. The naval blockade was found to be an effective means of interdicting this trade, and numerous blockades were conducted prior to 1600. Consequently, the naval blockade experienced significant development by the end of the sixteenth century and many important factors had already emerged during that period. The next chapter will review the naval blockade during the age of sail.

ENDNOTES

(1) Helmut Pemsel, A History of War at Sea (Annapolis, MD: U.S. Naval Institute Press, 1975), p. 10.

(2) Ibid., p. 24.

(3) Ibid., p. 21.

(4) Ibid.

(5) Ibid., p. 15.

(6) Ibid., p. 17.

(7) Ibid., p. 29.

(8) Ibid., p. 14.

(9) Ibid., p. 13.

(10) Ibid., p. 29.

(11) Alfred T. Mahan, Sea Power in its Relations to the War of 1812 (Boston: Little and Brown, 1905).

(12) Pemsel, p. 13.

(13) Ibid., p. 33.

(14) Ibid., p. 13.

CHAPTER 3

NAVAL BLOCKADES IN THE AGE OF SAIL 1600 TO 1860

INTRODUCTION

The naval blockade was widely used and fully developed during the age of sail. The most notable development was the extensive use of the defensive blockade designed to keep enemy ships trapped in port. During this period, the blockade experienced its greatest use during the eighteenth century and early nineteenth century. In this timeframe, it formed a key ingredient of the strategies of many nations, particularly Great Britain. During the transition from sail to steam, between 1815 and 1860, the blockade was not used, as there were no major naval wars during that era.(1)

IMPORTANCE OF THE DEFENSIVE BLOCKADE

The first major defensive blockade of this period occurred when the Dutch fleet under Admiral Van Tromp blockaded the Spanish fleet in the Downs, along the English coast, in September and October of 1639.(2) Similarly, a fleet under Dutch Commander Van Galen blockaded the English fleet in Elba and Leghorn for six months between September 1652 and March 1653. Both of these blockades were effective

in trapping those enemy fleets. However, Van Galen's blockade was particularly effective because he was able to completely destroy the English fleet, weakened by the blockade, as they attempted to escape.(3)

During the mid to late eighteenth century, the conflicts at sea became increasingly wars of blockade. All the important harbors along the Dutch, French and Spanish coasts were blockaded by the British, and as a result, the trade of those countries was substantially reduced. During this period, the Royal Navy began to stop and search neutral vessels for contraband.(4)

During the Seven Years War from 1756 to 1763, British Prime Minister Pitt made the blockade an integral part of his nation's overall strategy, which called for:

- 1) The subsidizing of allies on the continent to conduct the continental land war.
- 2) Use of the British fleet for:
 - a) Conducting a defensive blockade of the enemy fleet and to destroy that fleet when it attempted to evade.
 - b) To hold enemy troops away from his allies by conducting raids on the enemy's coastline.
 - c) Providing support to the Army which was to be used in seizing the colonies of the enemy along with maritime trade.(5)

This strategy proved to be successful because Pitt knew that Britain's small army would not be effective in the war on the continent. He also knew that Britain's strong

Navy could bottle up the French ports by blockade, which would keep the enemy fleet divided between ports in the Mediterranean and the Atlantic. Pitt reasoned that he could then use his remaining naval forces to support operations at any point around the world. By his wise use of sea power, he planned to cut off French support to her colonies.(6)

Alfred T. Mahan in his essay, "Blockade in Relation to Naval Strategy," pointed out how imperative the closing of hostile ports was to nations dependent on the sea for trade.(7)

The British Admiral Hawke devised the tactics that were used to conduct defensive blockades during the Seven Years War and in later wars against France.(8) In some respects these blockades did not represent a classic defensive blockade. The main purpose of these blockades was to keep a close watch on the enemy fleet and to allow the blockading fleet to concentrate its forces on the enemy when it attempted to leave port.(9) In this way, the blockaders could defeat or damage the enemy fleet before it was able to carry out its mission. However, the mere presence of the blockading fleet was often effective in preventing the enemy fleet from attempting to leave port. This concept was reflected in Admiral Collingswood's writings on the blockade he conducted at Rochefort:

Lying to in a heavy gale, ninety miles off shore. I cannot with certainty prevent the enemy slipping out before I return, yet I should be intensely mortified if he succeeded. The only thing to deter him is the fear that he may fall into our midst.(10)

These blockades were conducted by placing frigates, which were smaller and faster, close to the port. These frigates kept watch on enemy movements while the rest of the fleet remained further out to sea. In this position, the blockading fleet would be ready to engage the enemy whenever they were notified, by the frigates, that the enemy fleet had gotten underway.

This proved to be a highly efficient use of British sea power. Alfred T. Mahan later provided the following comments about the use of ships in this role:

Whatever the number of ships needed to watch those in an enemy's port, they are fewer by far than those that will be required to protect the scattered interests imperiled by an enemy's escape. Whatever the difficulty of compelling the enemy to fight near the port, it is less than that of finding him and bringing him to action when he has got far away. Whatever the force within, it is less than it will be when joined to that which may, at or near the same time, escape from another port.(11)

The escape of enemy ships could not always be prevented. As Admiral Horatio Nelson remarked "Nothing ever kept the French fleet in Toulon or Brest when they had a mind to come out." (12) However, the escape without engagement was by far the exception rather than the rule.(13)

After the famous Battle of Quiberon Bay in 1759, the British were able to maintain an unopposed blockade of French ports that virtually eliminated French vessels from the high seas. French merchant trade was devastated and the finances of the land were exhausted. The British further restricted French trade by rigorously seeking out contraband

in neutral shipping. As a result, the British were in firm command of the seas at the close of the Seven Years War and had effectively severed French communications and support of her colonies. This strategy eventually led to the British gaining control of Canada, Louisiana, Florida and Senegambia. (14)

The blockade was also the primary naval strategy used by the British in the War of 1812. This strategy included both offensive and defensive blockading. By May of 1814, this blockade had been extended to cover nearly all ports of the United States. This extensive blockade was successful in reducing merchant traffic to eleven percent of that in 1811.

American warships found it extremely difficult to evade this blockade. An example of this was Commodore Dewey who was forced to retreat into New London on the Thames River in 1813 with the ships UNITED STATES, MACADONIAN and a sloop. Due to the blockade, he could not escape and was forced to remain there until the war ended. (15)

IMPORTANCE OF TIMELY AND ACCURATE INTELLIGENCE

One of the key aspects which made the defensive blockade effective, was the ability of the blockading fleet to receive timely intelligence on the movements of enemy ships in the harbor. Only with this intelligence could the main body be positioned to effectively engage the enemy fleet as it attempted to leave port. This was the basis for

Admiral Nelson's resolve to never lose sight of the French fleet.(16)

As stated earlier in this chapter, the British relied on the frigates to obtain this information, and the effectiveness of the blockade depended on their ability to communicate this intelligence to the main body.(17) Alfred T. Mahan wrote the following concerning the importance of these frigates:

The scouting force of the fleet -- its eyes, its cavalry -- must be so multiplied, organized, and drilled that it can at one and the same time keep track of an enemy and go back and forth to its own main body. This being effectively done, the superiority of the latter comes into play.(18)

This same concept is reflected in Admiral Nelson's instructions to his frigate captains:

It is of the utmost importance that the enemy's squadrons in Toulon should be most strictly watched, and that I should be made acquainted with their sailing and route with all dispatch.(19)

The importance of this intelligence and the frigates that supplied it, can also be seen in Admiral Nelson's recurring request for "more frigates!"(20)

PROPER DISPOSITION OF BLOCKADING FORCES

One of the important factors which effected the outcome of the defensive blockades during this period was how the blockading forces were positioned. A prime example of this occurred during the period 1803 to 1805 when the British were conducting blockades of important French and Spanish harbors. Under a plan developed by the First

Lord of the Admiralty, Admiral Lord Barham, the British blockading ships were positioned at the enemy ports in relation to the relative strengths of the enemy forces operating in the vicinity of those ports.

There were two important results of this action. First, the British were able to keep track of the movements of the enemy fleets and were able to concentrate their forces against the enemy when they chose to. A classic example of this was Nelson's victory at Trafalgar following the allied fleet's departure from Cadiz, which was under Nelson's blockade. Secondly, Napoleon was forced to abandon his plans for an invasion of England which required that the channel crossing be supported by a battle fleet. This effective disposition of forces by the British prevented the allied fleet from evading the blockades at the various harbors and massing in the channel to support the crossing. (21)

NATIONS WITH EXTERNAL INTERESTS AND VITALLY DEPENDENT ON TRADE

In his essay "Blockade in Relation to Naval Strategy," Alfred T. Mahan discussed the importance of the naval blockade to a nation with external interests and to nations vitally dependent on trade. (22) This concept worked in two ways. On one hand, it was important for a nation with these characteristics to utilize the blockade against enemy nations as a part of its strategy. As stated earlier in this chapter, Britain, who had external interests and

depended on sea trade, used the blockade as an integral part of its overall strategy during this period. On the other hand, it was also important to utilize the blockade as an integral part of its overall strategy during this period. On the other hand, it was also important to utilize the blockade against nations which had external interests and were vitally dependent on sea trade. This was demonstrated by Britain's success over France, particularly during the Seven Years War, 1756 to 1763. This was also clearly demonstrated by the Dutch blockade of England in 1667. This tight blockade of English shipping, combined with the degree to which England was dependent on sea trade, resulted in the London government's readiness to discuss peace with the Dutch in only a matter of weeks. (23)

SUPERIOR SEA POWER

As was discussed in Chapter Two, the relative sea power of the belligerents involved in a blockade played a crucial role in the outcome of blockades prior to 1600. It was also to play a major role in blockades during the age of sail.

The first example of the importance of relative sea power during this period occurred in 1639 when the Dutch, with 100 ships, blockaded and defeated a Spanish fleet of only 70 ships in the Downs along the English coast. (24) Another occurred in 1667 when the British had allowed the majority of their fleet to be laid up and the crews to be

discharged. This occurred following the British General-at-Sea George Monk's victory over the Dutch fleet in 1666. Following this victory, this reduction in British sea power was allowed to take place during the long peace negotiation. As a result, the Dutch counterattacked with a raid on Chatham and established an unopposed blockade of England which forced the London government's hand at the peace negotiations. (25)

Another example of the effectiveness of sea power also took place between the English and the Dutch in October 1797. At this time, a British fleet under Admiral Duncan was conducting a defensive blockade of Texel. A Dutch fleet under Admiral De Winter tried to evade the blockade to support a landing of French troops in Ireland. Although both fleets were equal in the number of ships, with 16 ships of the line, the British ships were larger and more powerful. The end result was the defeat of the Dutch fleet and the delay of the French landing. (26)

The American blockade along the Mexican east coast by a squadron under M. C. Perry in 1847 also illustrated the importance of sea power to the blockade. This blockade, which was virtually unopposed by the Mexicans, successfully contributed to the treaty of Guadalupe Hidalgo. (27)

As there are examples of blockades that were successful throughout this period because the blockader possessed superior sea power, there are also examples of those that failed because they did not. The first prime

example of this took place in 1654 when a Turkish fleet of 76 ships fought its way out of a blockade of the Dardanelles by a Venetian fleet of only 26 ships. (28)

Similarly, in 1658 a Swedish fleet under Count Wrangel blockaded Copenhagen by land and by sea. An engagement occurred between a Dutch fleet of roughly an equal number of ships and the blockaders in the sound. Although the fighting was not decisive for either side, because of the fact that the Swedes did not clearly hold superior sea power, they were no longer able to maintain the blockade. (29)

Later, in January 1780, British Admiral Rodney used the superior sea power of his fleet of 22 ships of the line and nine frigates to break a Spanish blockade of Gibraltar. In this case, the Spanish fleet under Admiral Langara consisted of only 11 ships. (30)

In each of these cases, when the blockading force was slightly stronger or equal to the evading force, the result was normally failure because the blockader was no longer able to remain on station. This is again demonstrated in June of 1783 when a blockading fleet of 16 ships under British Admiral Hughes conducted a blockade of Cuddalore, India. A French fleet of 15 ships under Commodore Suffren attempted to repel the blockade. Again the fighting was not clearly decisive, however, Hughes was forced to lift his blockade. (31)

A famous example of this concept is known as the Battle of the Glorious First of June. This battle occurred in 1794 and resulted from a food shortage in France which required that the French import large quantities of grain from America. A French squadron at Brest attempted to escort the convoy of merchant ships carrying the grain by breaking out of the British blockade. The French squadron was intercepted by the British squadron of equal strength. Although the French were tactically defeated in this battle, the merchant ships were untouched. As a result, they were able to continue into Brest, unload the grain and succeed in accomplishing the overall strategic aim. (32)

WEATHER

Weather played a major role in many blockades during this period, because it often determined when and how long a blockading fleet could remain on station. Often times, the fleet conducting a blockade would leave station and take up winter quarters to avoid the winter storms. They would then return to station in the spring. This procedure often failed because the blockaded fleet would simply leave before the blockaders returned. An example of this occurred during the War of the Spanish Succession when the English Admiral Sir Clondisley Shovell was sent to blockade Brest after winter quarters in England. However, he arrived too late in the spring and found that the French fleet had already escaped. (33)

Similarly, ships were often forced to temporarily abandon station by bad weather. This sometimes provided the blockaded fleet an opportunity to escape. An example of this occurred in November of 1759 when a British fleet under Admiral Sir Edward Hawke had to abandon a blockade of Brest due to bad weather. As a result, the French fleet under Hubert Conflaws was allowed to escape. Hawke's fleet was able to chase the French fleet and eventually engaged them in the waters of Quiberon Bay. This fierce battle resulted in the destruction of the French fleet. (34)

The effects of weather also affected decisions regarding whether or not to impose a blockade. In October of 1827, an allied fleet of British, French and Russian ships were positioned outside the Bay of Navarino, where a Turkish fleet was at anchor. It was decided that the allied fleet would enter the bay and attack rather than blockade due to the approach of winter and subsequent winter storms. (35)

The weather damage incurred by blockading ships on long periods of duty on station had detrimental effects on those ships' abilities to conduct their blockades. This effect was seen on British ships off of France in the late 1700's where long periods without repair opportunities not only degraded the condition of the ships, but also wore down the officers and crews. (36)

Although weather had a detrimental effect on the blockading force, it also had a detrimental effect on the

force attempting to evade. Bad weather often provided opportunities for trapped fleets to escape. however, these escaping forces often found themselves in poor weather conditions for which they had little experience and training due to their idle conditions in port under blockade.(37) This factor of experience and training will be discussed in further detail later in this chapter.

ABILITY TO CONDUCT RESUPPLY OF BLOCKADING FORCE

Just as weather often times influenced the ability of a blockading force to remain on station, the ability to resupply that force also proved to be critical. The ability of the Dutch to conduct the blockade of the Spanish fleet at anchor in the Downs in 1639 can be attributed to the steady resupply of ships from nearby Holland, in addition to their superior sea power.(38) Similarly, the British fleet under Admiral Sir Edward Hawke was able to remain on station off France in the 1750s due to a constant resupply of his ships from nearby Portsmouth.(39)

On the other hand, blockades were at times lifted because the blockading fleet was not able to get adequate supplies. An example of this was the American blockade of Tripoli under Richard Dale in July 1801. Dale was forced to abandon the blockade and sail to Malta to obtain fresh water.(40)

POSSESSION OF STRATEGIC BASES

Closely related to the concept of resupply, was the importance of holding strategic bases from which to resupply the blockading fleet. Obtaining strategic bases near major ports and in focal areas where shipping converges, was a major objective of the British in peace negotiations of this period. Examples of these bases included Gibraltar and Minorca which gave the British the ability to resupply and refit ships assigned to long periods of blockade duty.(41)

In 1756, as part of England's overall strategy, William Pitt directed a blockade of all important French naval bases. This included Dunkirk, Cherbourg, St. Malo and Brest on the English Channel and Belle Isle and Rochefort in the Bay of Biscay. The blockading fleet operating off these ports were able to be supported out of the English ports of Chatham, Portsmouth and Plymouth. However, Pitt also instituted a blockade of the Mediterranean ports of Toulon and Minorca. The blockade of the Mediterranean ports was made possible by using Britain's base in Gibraltar for support and resupply.(42)

In later years, the British were able to gain rights to use Minorca as a naval base, but as relations worsened with the Spanish in 1794, Minorca became unavailable. The British felt that it was important to obtain a base closer than Gibraltar to fully support the blockade of Toulon. To remedy this situation, a campaign was led by Lord Hood to capture Corsica. In the subsequent fighting to gain

Corsica, Nelson (then a captain) was wounded and lost the sight of his right eye. However, by June 1794 Corsica was secured as a support base. As a result, it was effectively used as a resupply base for the successful blockade of French Mediterranean ports.(43)

ANCHORAGES ON THE FLANK OF ENEMY TRANSIT ROUTES

Even with adequate support bases, the English often located anchorages on the flank of the routes that enemy ships were required to take. Often, with the poor material condition that ships suffered after extended blockade duty, these anchorages enhanced the blockade by giving crews a period of rest while also providing for limited upkeep. Nelson used Maddalena Bay in Sardinia, during his blockade of Toulon in 1804 and 1805, in this manner as did Sir James Savmerez who used Douarnenez Bay on the French coast for his in-shore squadron during the blockade of Brest in 1800.(44)

USE OF NEW TECHNOLOGY

The use of new technology by blockading forces also played an important role in the blockades of this period. The first example included the use of "fire ships" by the Dutch against the blockaded Spanish fleet in the Downs in 1639. The Dutch filled 11 ships with flammable material, set them on fire and sailed them into the Spanish fleet at anchor. The Spanish fleet was so surprised by these burning ships that they were barely able to cut their anchor cables in time. The resulting state of confusion caused many

Spanish ships to be sunk by the "fire ships" and many more were run aground. The result was the destruction of the majority of the Spanish ships, with the remainder being stranded.(45)

The use of new technology was also to play a key role in the British blockade of Copenhagen in September of 1807. The British fleet under Admiral Lord Gambier used new incendiary projectiles to bombard the city. This bombardment also included the use of the new Congreve Rocket invented by an Englishman of the same name. This bombardment was to play a key role in the capture of Copenhagen.(46)

A similar use of new technology was utilized in November 1853 by a Russian fleet conducting a blockade of a Turkish squadron at anchor in the roads of Sinope. The Russians were able to destroy the Turkish squadron primarily by using explosive shells designed by a Frenchman named Paxihans. In this engagement, the solid shot and wooden hulls of the Turkish ships proved to be no match for the explosive shells.(47)

It is interesting to note that two significant developments in technology were developed during this period to be used against blockading forces. However, neither one was ever used against blockading ships. The first of these developments was a primitive submarine built by Robert Fulton who offered it to the French for use against the blockade by Britain. However, the French decided not to use

the submarine and turned down his offer.(48) The second development was one of the early experiments in naval steam propulsion. Again Robert Fulton designed the first steam propelled warship to be used to break the blockade of American ports by England in the War of 1812. This vessel, initially named the DEMOLOGOS, was built with sides five feet thick, and with the engines and boilers located low in a twin hull design. The paddle wheel was located between the two hulls where it could be protected. This vessel was nearly invulnerable to the ordnance of the time, however, it was not completed until after the war ended.(49)

THE COMBINATION OF NAVAL BLOCKADE AND LAND OPERATIONS

Even with the advances in technology during this timeframe the naval blockade in and of itself was not effective in producing the required results. Unless the blockade was supplemented by operations ashore, it had little chance for success. Even the extensive blockades of France by Britain utilized a coalition to fight the land war, in addition to the naval blockade, to form the basis for its strategy.(50) The British blockade of Copenhagen in 1807 demonstrated another example of this joint concept. In this blockade, the fleet under Admiral Lord Gambier operated in conjunction with land forces under Lieutenant General

Lord Cathcart who landed on Zealand and conducted a blockade from the land side. (51)

In 1847, the blockade of the Mexican east coast by a squadron under M. C. Perry was combined with an amphibious landing south of Vera Cruz. This was the largest amphibious landing in history prior to World War II and resulted in the landing of 10,000 troops ashore. This combined effort led to the Treaty of Guadalupe Hidalgo. (52)

The English blockade of the American Atlantic coast during the War of 1812 significantly reduced American trade. However, the British devoted only minor resources to the North American theater throughout the war, and remained primarily on the defensive. In large part, this was due to the fact that the British entered that war reluctantly and devoted most of their efforts to defeating Napoleon. Because there was no massive or effective land campaign conducted, the results of the blockade were not really decisive. (53)

IMPORTANCE OF CAPTURING KEY PORTS

The capture of Vera Cruz during the American blockade of Mexico's east coast in 1847 represented an important factor in conducting successful blockades. The blockade was strengthened, and the pressure on the blockading forces was significantly reduced, when key ports were in the hands of the blockader. (54)

THE USE OF DECEPTION

This period of history also saw the use of deception in the naval blockade. In 1797, a British force of only two ships under Admiral Adam Duncan conducted a defensive blockade of the Dutch fleet in Texel. Admiral Duncan was able to successfully conduct this blockade by ingeniously deceiving the Dutch by sending flag signals to an imaginary reinforcing fleet supposedly operating, out of sight, over the horizon. (55)

INADEQUATE LAND TRANSPORTATION INSIDE THE BLOCKADED NATION

The adequacy of the internal land transportation system within the blockaded nation significantly impacted on the effectiveness of blockades during this period. If the internal land transportation system was inadequate, it tended to amplify the effects of the blockade. Such was the case in America during the War of 1812. During this war, the British blockade severely hampered coastal trade along the Atlantic coast. Few roads existed and those that did exist were almost unuseable during inclement weather. In many cases supplies could not be moved from warehouses to support the American Army. (56)

USE OF SHALLOW DRAFT VESSELS TO BREAK BLOCKADES

Although the British were able to severely restrict coastal trade along the Atlantic coast in the War of 1812, there were several instances where coastal traffic could not

be stopped. This was primarily due to the inability of blockading forces to interdict shallow draft vessels operating in restricted waters close to shore. The larger warships were constrained by their drafts from entering these shallow waters to intercept the vessels hugging the shoals. An example of this took place in the spring of 1802 when an American squadron under Richard Morris conducted a blockade of Tripoli. Morris was unable to stop Tripolitan freighters transiting close to the shoreline. As a result, this blockade realized limited success.(57)

In other cases, blockades were broken by shallow draft vessels which escaped the blockade by transiting through shallow water where the warships were unable to pursue. This tactic was employed in July 1790 during a Russian blockade of a Swedish fleet in Vyborg Bay. The Swedish fleet utilized a diversionary surprise attack, combined with covering fire from the larger warships, to allow their shallow draft galleys and transports to slip out through shallow water.(58)

THE EFFECTS OF TRAINING AND EXPERIENCE

As previously mentioned in this chapter, the effects of long periods on blockade duty tended to wear down both ships and crews. However, these units also gained valuable experience and training while on station because they were operating and exercising their ships on a daily basis. This gave them a distinct advantage over the blockaded ships

sitting idly in port. This factor was discussed by Alfred T. Mahan in his essay "Blockade in Relation to Naval Strategy" in which he wrote:

Moreover, it should be remembered that if the blockade has continued for some time, the escaping ships, despite the advantages otherwise possessed by them (clean bottoms, full coal, etc.) will have to do with vessels that have had nightly experience of embarrassments, which they themselves will be undergoing for the first time; a condition precisely analogous to that lamented by Villeneuve when he wrote, "They have not been exercised in storms," or as Nelson wrote of the same occasion, "These gentlemen are not used to the hurricanes, which we have braved for twenty-one months without losing mast or yard." Is any one disposed to reckon lightly of the moral effect - that most potent spell - or of the trained dexterity, acquired by the mere habit of doing things in the dark and under difficulties? Evasions if undertaken at all, will not be on moonlight nights and smooth seas, but under conditions that will, to say the least favor evasion. The same conditions will also beyond all doubt in my mind, as far as their special influence extends, favor the familiar outsider rather than the unfamiliar insider. (59)

THE INFLUENCE OF LAW ON THE BLOCKADE

The age of sail was the beginning of the influence that international law has had on the blockade. The right of blockade was first established in 1650 when an English General-at-Sea, Robert Blake, intercepted and captured an enemy merchant fleet transiting from Brazil. This action established the right of a maritime nation at war to interdict neutral trade which might be used to aid an enemy nation. (60)

The British later adopted the rule of CONSOLATO DEL MARE in conducting their blockades of this period, while the French utilized the rule of ORDONNANCE DE LA MARINE of 1681.

These rules varied as to the impact on neutral vessels operating in the vicinity of a blockade. This had a direct impact on the willingness of a neutral nation to risk sending shipping into these areas and thus influenced the outcome of the blockade. (61)

During the period between 1713 and 1756 many nations had agreed, through treaties, that neutral shipping could transport noncontraband goods to belligerent ports not under an effective blockade. Additionally, most nations agreed that a blockade had to consist of a patrol by an armed naval force of at least two warships at each blockaded port or that the approaches to a port be covered by shore batteries with intersecting arcs of fire, in order to be considered effective. This meant that a blockade would actually have to be enforced rather than just declared, in order to be a lawful blockade. This concept fell under dispute for many years. (62)

During the Seven Years War, 1756 to 1763, the British used an Act of Parliament known as the "Rule of War, 1756", in conducting their blockades. This act authorized British naval vessels to stop and search neutral vessels trading with their enemies. The effect of this act was to further extend their blockades into a broader economic arena. (63)

Foodstuffs as contraband was stipulated in Jay's Treaty between England and the United States in 1797. This

treaty greatly angered the French who responded with the Decree of 18 January 1798. This decree outlined that:

Every vessel found at sea laden in whole or in part with merchandise coming from England or her possessions shall be declared good prize.

This made American merchantmen more vulnerable to the actions of privateers. As a result, over 300 American merchantmen had been seized within a year.(64)

As a part of the Declaration of Paris, 1856, neutral shipping of noncontraband goods was allowed to belligerents. This declaration also contained the stipulation that a blockade had to be effective in order to be legal and that blockaded ports had to be patrolled specifically by warships. As was the case in all of these laws and declarations, the adherence to their provisions and stipulations depended primarily on the interpretation and willingness to abide by them of the nation with the greatest sea power. During this period, Britain had the major influence.(65)

SPEED CAPABILITY OF BLOCKADING SHIPS

Another factor, related to proper positioning, which effected the ability of a blockading force to conduct a blockade, was the speed of their ships. This was of great importance, especially to a defensive blockade where pursuit played a key role. Alfred T. Mahan provided the following thoughts in his essay "Blockade in Relation to Strategy":

Moreover, the ships with clean bottoms should always be as numerous -- at the very least -- as the enemy's ships of the same class within. If track of an evading division is not lost, a very consequential factor in pursuit is likely to be the ship first to give out or slow down. (66)

CHARACTERISTICS

There were seventeen characteristics identified from the use of the blockade during this period. They are:

1) The defensive blockade was an extremely valuable part of effective strategies during this period.

2) The receipt of accurate and timely intelligence by the blockading fleet played a key role in the effectiveness of blockades.

3) Proper disposition of forces enhanced the effectiveness of blockades.

4) The naval blockade was effective against nations with external interests and who were vitally dependent on sea trade.

5) Superior sea power played a critical role in the outcome of blockades.

6) Bad weather was a significant detriment to the ability of a blockading force to remain on station and conduct a successful blockade.

7) Successful blockades depended greatly on the ability to resupply and repair the blockading ships.

8) Possession of strategic bases, in the vicinity of the blockade, significantly enhanced those blockades.

9) Use of anchorages on the flanks of enemy transit routes provided blockading ships an opportunity for crew rest and upkeep while maintaining a position to respond.

10) The use of new technology by blockading forces enhanced those blockades.

11) The combination of land operations, in conjunction with the naval blockade, was critical to the overall success of blockades.

12) The use of deception could enhance blockades.

13) Inadequate land transportation within a blockaded nation could amplify the effects of a blockade.

14) Shallow draft vessels were used to break blockades if the blockading forces did not also include shallow draft vessels.

15) Training and experience on station enhanced the ability of the blockading forces.

16) Law influenced the scope and means in which blockades were conducted. Additionally, the effects of law on blockades were significantly influenced by the interpretation of those laws by the nation with the greatest sea power and by the willingness of that nation to abide by them.

17) The speed capability of the blockading ships could influence the outcome of blockades.

CONCLUSIONS

The age of sail was a time in which the naval blockade was utilized extensively. The naval blockade was

one of the key elements of Britain's strategy during the rise of British sea power that occurred in this era. As a result, the naval blockade developed substantially during the age of sail. The concepts and developments that emerged from this time period had a significant impact on the employment of blockades which occurred later in history. One of these later blockades was the blockade of the Confederacy during the American Civil War, which is reviewed in the next chapter.

ENDNOTES

(1) E. B. Potter, Sea Power: A Naval History (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1960), p. 243.

(2) Helmut Pemsel, A History of War at Sea (Annapolis, MD: Naval Institute Press, 1975), p. 43.

(3) Ibid., p. 48.

(4) Ibid., p. 83.

(5) Potter (2d ed.), p. 26.

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CHAPTER 4

THE AMERICAN CIVIL WAR: THE UNION BLOCKADE OF THE CONFEDERACY 1861 TO 1865

INTRODUCTION

The Union strategy during the American Civil War closely resembled the strategy of Britain in 1776.(1) The Union strategy was to weaken the Confederate Army by cutting off its logistic lines of communication. This strategy was called the "Anaconda" strategy because it slowly strangled the southern army. This strategy consisted of a naval blockade of the Confederate coast, the capture of key southern ports, the cutting off of internal waterways along the lines of the great rivers and the capture of the Mississippi Valley to cut off supplies from the southwest.(2) Alfred T. Mahan described the blockade portion of this concept in his essay "Blockade in Relation to Naval Strategy," in which he said:

The latter (the blockade of the coast of the Southern Confederacy), however, was a purely strategic operation, which may be accurately described as a steady and strangling pressure upon the enemy's lines of communication, with the result of producing exhaustion through the failure of necessary resources.(3)

The results of this strategy on the South's economy, military strength and society were significant. In 1862,

1863 and 1864 the South's export of cotton dwindled to only ten percent of pre-war years. Common everyday items such as clothing, household goods and shoes could only be obtained at prohibitive prices throughout the war. Blockade runners primarily carried luxury items at high prices. Their insistence on being paid in gold, depleted southern gold reserves and forced the South to barter with cotton. Even as early as 1862, many Confederate soldiers could not obtain shoes. (4)

These severe economic problems developed relatively early in the Civil War and worsened as the war continued. Although the blockade was not the only cause of this economic chaos, it was the primary tool responsible for bringing about those conditions. The Union Armies only began to gain superiority over the South after the South had been internally weakened by economic failure. This could not have been achieved without superior Union sea power. The blockade was the primary tool used by the Union Navy, and it is one of the leading factors that caused the collapse and defeat of the Confederacy. (5) Many agreed with Britain's Lord Wolseley when he said:

Had the ports...been kept open...by the action of any great naval power, the Confederacy must have secured their independence. (6)

This chapter will review those factors which contributed to the success of the Union blockade and those factors that detracted from it.

LIMITED NUMBER OF MAJOR SOUTHERN SEAPORTS

Although the Union blockade had to cover approximately 3,500 miles of coastline and almost 200 harbors and navigable rivers, the Union Navy was eventually able to establish an effective blockade.(7) One key factor which contributed to this, was the limited number of major ports operated by the Confederacy.(8) As a result, the Union concentrated its blockade off these important southern ports, thereby increasing the efficiency of its blockading ships.(9)

CAPTURE OF KEY PORTS

Part of the "Anaconda" strategy called for the capture or control of key southern seaports.(10) This strategy was also enhanced by the limited number of seaports with railway connections. This strategy worked, and ten months after the Battle of Bull Run, seven out of ten major Confederate seaports with railway connections had been captured or were under the control of Union forces.(11) By 1864, the only southern port of any size that remained under Confederate control was Mobile.(12) With Farragut's control of Mobile Bay, the blockade became total in August 1864.(13)

IMPORTANCE OF STRATEGIC BASES

These captured seaports also played an important role for the Union blockading ships. The Union Navy utilized those captured ports as strategic bases to resupply and refit their ships on blockade duty. These captured

ports eliminated the need for blockading ships to return periodically to northern ports, such as Philadelphia, for upkeep. Additionally, while these ships were taking on supplies at one of these strategic bases, they were still available as a ready reserve to back-up ships still on station. Altogether, these bases resulted in more Union ships on station which further strengthened the blockade.(14)

IMPORTANCE OF ADEQUATE LOGISTICS AND RESUPPLY

In addition to these strategic bases, the Union eventually developed an outstanding system of logistics and supply for their blockading squadrons. This allowed their blockading squadrons to remain on station over the extended southern coast. It also allowed them to remain on station for longer periods.(15)

ADEQUACY OF INTERNAL TRANSPORTATION SYSTEM

As was demonstrated in Chapter Three, an inadequate internal transportation system within a blockaded nation enhanced the effects of a blockade. On the other hand, a good internal transportation system could hinder a blockade. With a good internal transport system, a ship able to breach a blockade by entering a port other than its blocked destination, could still distribute its cargo without significant disruption.(16)

At the beginning of the Civil War, the Confederacy had an excellent internal transportation system which utilized the extensive inland waterways of the southern

United States. These rivers and waterways were natural highways which provided a dependable means of carrying supplies required to support the large Confederate Army.(17) In addition, there was little land transportation to replace these inland water routes if the South was denied their use.(18)

As a result of these conditions, control of these inland waterways formed a key part of the Union's overall strategy. Gaining control of these waterways was a logical extension of the blockade and contributed to the effects of the blockade.(19) The Union's ability to succeed in this task was later commented on by Alfred T. Mahan, who wrote:

The streams that had carried the wealth...of the seceding states turned against them, and admitted their enemies to their hearts.(20)

GEOGRAPHIC CONSIDERATIONS

Long coastlines with numerous harbors were normally disadvantageous to blockades because it resulted in forces that were too widely dispersed. Additionally, if units were brought together for mutual support, it left too many ports open for trade.(21) Similarly, extensive inland waterways and long estuaries with strong fortresses were detrimental to blockades. This was because these conditions normally allowed enemy ships to retreat back and evade pursuit while receiving protection and support. All of those conditions existed in the south during the Civil War.(22) The Union was able to overcome these detriments and nulify these

conditions by using vastly superior sea power, capture of enemy seaports and control of the inland waterways.

USE OF SUPERIOR SEA POWER

At the beginning of the Civil War, the Union Navy was too small and ill-equipped to perform a blockade over such an extensive area. At the initial outbreak of the conflict, the Union Navy consisted of only 7,600 men and 42 ships. However, under the guidance of the Union Secretary of the Navy, Gideon Welles, the Navy grew quickly and by December of 1861 it numbered 264 vessels. The Confederate Navy began the war with even less sea power. The industrial base of the South was inferior to that of the North, and the population of the South was primarily oriented around agriculture. There were few people trained in maritime trades when compared with the North. As a result, the South realized that they would never be able to match the Union Navy. Instead, with the exception of obtaining a limited number of ironclads and devices designed to break blockades, they concentrated their maritime efforts on privateering, commerce raiding and blockade running. All of these endeavors had a limited effect on the total war effort of the Confederacy. (23)

The Union Navy continued to grow and remained vastly superior to the Confederate Navy throughout the war. The lack of a strong Navy in the South permitted the Union Navy to scatter ships all along the extensive southern coasts, singly or in small detachments. (24) This overwhelming sea

power, in combination with the capture and control of major southern seaports, made the blockade absolute by the end of the war.(25)

CONTROL OF BLOCKADE RUNNERS

A great deal has been written about the sensational exploits of blockade runners and Confederate raiders during the Civil War.(26) However, the total volume of trade carried by the blockade runners was of little significance to the total Confederate war effort.(27) Similarly the hit and run tactics utilized by Confederate raiders, who avoided the blockade, did little to overcome the superior sea power enjoyed by the Union Navy.(28)

Prior to May 1862, blockade running was not very hazardous due to the limited number of Union ships on station and the number of seaports still in Confederate hands. The South utilized all types of vessels to run the blockade to Havana, Nassau, Bermuda and St. Thomas with cargoes of cotton. However, as the blockade became more efficient, with an increased number of Union warships, small sailing vessels became impractical as blockade runners. Fast steamers became the only vessels considered capable of running the blockade.(29) By the end of the war, 84 of those steamers had been specifically built as blockade runners. As the Union blockade grew tighter, as the war went on, even those specially built steamers became increasingly vulnerable to the blockade. Of the 84 steamers

built, 37 were captured, 25 were lost to grounding, collision or accident and only 22 survived the war.(30) Altogether, the Union utilized four squadrons totalling roughly 300 vessels in the blockade which captured approximately 1500 blockade runners by the end of the war.(31)

Although the blockade runners made fantastic profits by running the blockade, their relatively small cargo capacity was incapable of carrying the amount of goods required to sustain southern cotton exports. Additionally, their cargoes on return trips, back to the south, consisted primarily of luxury items, at extremely high prices, for the southern aristocracy. This did little to aid the southern war effort.(32)

In many ways, the exploits of the blockade runners were detrimental to the South's ability to wage war. Southerners trained in maritime skills, badly needed in the Confederate Navy, instead found employment on the highly profitable blockade runners. Additionally, large amounts of money, that otherwise would have gone into development of the Confederate war effort, was diverted to blockade runners. Furthermore, because the blockade runners insisted on being paid in gold, the southern currency was further devaluated due to the increased flow of gold out of the country. Likewise, frivolous luxury items replaced chemicals, boiler iron and medical drugs required for the war effort, in the holds of the blockade runners.

All-in-all, the blockade runners did more harm to the South than they did good. In effect, the blockade runners aided the "Anaconda" strategy more than they defeated it.(33)

TRANSFER CENTERS NEAR THE BLOCKADE ASSIST BLOCKADE RUNNERS

Although the efforts of blockade runners during the Civil War were limited, they were greatly assisted by transfer centers or transshipment centers close to the blockade. Civil War blockade runner primarily used Nassau, Havana, Bermuda and Halifax as transfer centers to deliver outbound cargoes and pick up goods for shipment back to the South. These transshipment centers reduce the blockade runners voyage length, turn around time and vulnerability to Union warships. This also made it more difficult for the Union Navy to interdict contraband coming into these transfer centers on neutral vessels.(34)

LOCATING NEUTRAL PORTS AND PRIZE COURTS

One aspect which aided the Union's blockade was the ability to take neutral vessels, suspected of carrying contraband, to neutral ports. Once the escorted vessel arrived in the neutral port, it would fall under the jurisdiction of a prize court.(35) One detrimental aspect associated with this procedure was that it took vessels off station to conduct the escort.

THE BLOCKADE'S DISCOURAGEMENT OF NORMAL TRADE

Another key to the success of the Union blockade was the degree to which its existence discouraged normal trade. Many neutral merchants refused to run the risks of capture of the Union blockading squadrons. This left the merchant trade to the blockade runners and their disastrously high prices.(36)

THE COMBINATION OF THE NAVAL BLOCKADE AND LAND OPERATIONS

As was mentioned earlier in this chapter, the capture of the Mississippi Valley and key seaports by land and naval forces, along with the naval blockade, formed a key part of the Union strategy.(37) A clear example of the effect of this combination was seen in General Sherman's march to the sea in late 1864 and early 1865. This operation, which was supported by Union blockading ships, destroyed the only remaining granary of the South and was one of the final blows leading to the surrender of the South.(38) Another example which shows the effectiveness of cooperation between the Army and the Navy was the capture of Mobile Bay in 1864. In this operation, General Canby, who was a supporter of Admiral Farragut, committed additional troops to attack Mobile. This commitment of additional land forces significantly contributed to Admiral Farragut's capture of Mobile Bay.(39)

BLOCKADER'S ABILITY TO COUNTERACT TECHNOLOGY
DESIGNED TO BREAK THE BLOCKADE

The 1860s was an era of invention and an era of rapid advancements in engineering and weaponry.(40) A number of these inventions and advancements were specifically designed to break the Union blockade of the South. Probably the most famous of these developments was the ironclad. The South placed a great deal of effort into their ironclads in an effort to drive off the blockading fleet. The ironclads were initially feared by the captains of the blockading ships with wooden hulls, many of which developed "ram fever."(41) However, the rams of these ironclads proved to be far less effective than initially thought. These ironclads with rams accounted for the sinking of only three ships. Probably the greatest key to their failure was the fact that they were inferior and unreliable due to the lack of proper and adequate materials for construction. Additionally, they were underpowered and were slow and clumsy to handle.(42)

As a result of their inferiority, the Union fleet was able to devise ways to defeat them. An example of this occurred in August of 1863 when a Union force under Admiral Farragut defeated the ironclad CSS TENNESSEE during the Battle of Mobile Bay. Farragut placed several ships at point blank range from the CSS TENNESSEE, where the fifteen inch guns from USS MANHATTAN were able to pierce her armor. Furthermore, the eleven inch guns from USS CHICKSAW were

fired from a position directly astern into the aft side of the casemate at a range of fifty yards. Admiral Buchanan, in charge of the Confederate action in this battle, was embarked in TENNESSEE and was wounded by this fire while inspecting the damage. Additionally, the tiller chains to her rudder head were exposed as they ran along her after deck. Rounds fired from the Union ships carried away these chains as well as the relieving tackle which was rigged to replace them during the course of the battle. As a result the TENNESSEE was left dead in the water.(43)

The South also utilized semisubmerged mine craft to attempt to break the blockade. One of these craft, called Davids, did damage the Union ironclad NEW IRONSIDES. However, the overall results of these craft did not prove to be very effective. The South also used the submarine to try and break the blockade. The CSS HUNLEY was the first submarine to sink a warship. This endeavor was not very practical, however, because two crews were drowned preparing for the attack, and a third crew was drowned during the engagement.(44)

By far the greatest technological development utilized against the Union blockade by the South was the mine. This accounted for the loss of more Union ships than any other cause.(45) All-in-all, mines sank seven ironclads and twenty wooden hulled vessels. Mines also damaged an additional eight ships.(46) An anti-mine device was

eventually developed by Admiral DuPont which consisted of metal barges pushed ahead of ships to trigger the mines.(47)

THE INFLUENCE OF LAW ON THE CIVIL WAR BLOCKADE

The influence of law played an important role in the Union's blockade during the Civil War. Even the actual declaration of blockade fell somewhat into conflict during this war. Gideon Welles, the Union Secretary of the Navy, desired that a proclamation, announcing the closure of southern ports, be used because a formal declaration of blockade acknowledged that a state of war existed under international law. Welles, as well as many other northern leaders, felt they were facing more of an internal rebellion rather than a state of war. When viewed in that light, the Confederates would have no belligerent rights under international law if a formal blockade was not declared. However, this group was overruled and the blockade was eventually declared.(48)

Another factor of law which influenced the blockade was the use of the doctrine of "continuous voyage" by the North. This doctrine stated that if a cargo was ultimately destined for the Confederacy, an intermediate neutral port did not protect the ship or its cargo. An example of this was the case of the PETERHOE which was captured in 1863 near St. Thomas. It carried a mixed cargo from London to Matamoras, Mexico which was ultimately destined for the South. The PETERHOE was condemned by a prize court, but

this decision was later overturned by the U.S. Supreme Court and the owners were compensated. However, this doctrine was to have a significant impact during the course of the war.(49)

Other laws affecting the outcome of the blockade included the British neutrality laws. These laws restricted the equipping, furnishing, fitting out or arming of a ship which would be used to wage war on a friendly nation. Although, in some cases, these laws were skirted by installing weaponry on vessels in another location after being built in England. However, these laws did prevent the Confederacy from obtaining British built ironclads and "rams" which could have posed a serious problem for the Union blockade.(50)

Another law imposed as a result of the blockade was an act of the Confederate Congress, 1 March 1864. This law forbade the importation of luxury items and was designed to offset the negative aspects of the blockade runners. This law, however, was generally not enforced.(51)

CHARACTERISTICS

There were fourteen major characteristics or factors concerning blockades that emerged from the Civil War. These factors included:

- 1) A limited number of major seaports within a blockaded nation enhanced a blockade.
- 2) The capture of key ports in the blockaded nation enhanced a blockade.

3) The possession of strategic bases, by the blockading nation, near the blockade was important to the successful outcome of the blockade.

4) Adequate logistics and resupply was vitally important to blockading forces.

5) The adequacy of internal transportation systems within the blockaded nation influenced the outcome of the blockade.

6) Long coastlines, numerous harbors, extensive inland waterways and long estuaries were normally disadvantageous to blockaders. However, these disadvantages could be offset with superior sea power, the capture of enemy ports and the control of inland waterways.

7) Superior sea power was critical to the blockader.

8) Control of blockade runners was important to the outcome of a blockade.

9) Use of transfer centers near the blockade assisted blockade runners and could weaken a blockade.

10) The ability to locate and utilize neutral ports and prize courts enhanced a blockade.

11) The discouragement of normal trade, caused by a blockade, added to its effectiveness.

12) Cooperation between the Army and Navy of a blockading nation, along with the combination of the naval blockade with land operations, significantly contributed to the positive outcome of blockades.

13) Blockaders were required to counteract technology which had the capability of breaking blockades.

14) Law had a great impact on naval blockades. Additionally, the use of the doctrine of "continuous voyage" significantly helped blockaders.

CONCLUSIONS

The naval blockade was a key element of the Union's strategy against the Confederacy during the Civil War. Although it was initially not considered a tight blockade, it increased in effectiveness over the course of the war. The results of the blockade had a serious impact on the South's economy and war effort. This blockade, which continued over several years, contributed directly to the eventual surrender of the Confederacy. This was one of the most significant periods of blockade in history, a fact which is highlighted in the fourteen major characteristics which were derived from the Union's efforts. The next chapter will review blockades conducted during the age of iron and steel.

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CHAPTER 5

NAVAL BLOCKADES IN THE AGE OF IRON AND STEEL 1866 TO 1973

INTRODUCTION

The continuing development of technology following the American Civil War had a direct impact on naval warfare. The development and implementation of such inventions as steam propulsion, the submarine, the torpedo, the torpedo boat, steel, naval aircraft, the aircraft carrier, radar, sonar, radio communications and guided missiles have each made a dramatic change in naval tactics. Prior to World War I, the theory of the day at the French Naval School, JEUNE ECOLE, was that the close Nelsonian blockade had been made impossible. This, according to followers of this theory, was a result of inventions such as the torpedo, torpedo boat and submarine.(1)

Alfred T. Mahan opposed this view because he saw that the true nature of a defensive, Nelsonian blockade was to draw the enemy fleet out of port so that it could then be engaged and defeated.(2) For this type of blockade, he saw the aims and dangers as the same as those in Nelson's time. Mahan made the following comments in an article entitled "Blockade in Relation to Naval Strategy":

For one thing I think we may be reasonably certain, that the strategic danger, and the strategic aim, of a Navy which seeks to close-watch hostile ports, are the same today as formerly.(3)

In the same article, Mahan alluded to the fact that inventions such as steel, steam propulsion and the torpedo had indeed changed the problem of the close blockade. Yet, he believed that these developments effected tactics rather than the principles, concepts or strategies.(4) Mahan stated that such developments "...simply widened the question, not changed its nature."(5)

The continued use of the blockade well into the twentieth century, strongly supported Mahan's views. This chapter describes those blockades which occurred between 1866 and 1973. This chapter does not describe the blockade of Cuba during the Cuban Missile Crisis in 1962. Although this blockade did occur within this time period, that blockade is discussed in detail in Chapter Six.

THE FRANCO-PRUSSIAN WAR 1870-1871

The first major blockade that was implemented, following the American Civil War, occurred during the Franco-Prussian War. During that war, the French Fleet attempted to blockade the German coast. However, because of the rapid advance of the German armies, the blockade had to be lifted.(6) This action again highlighted the importance of land operations in conjunction with the blockade and the

direct effect that failure of operations ashore can have on the blockade at sea.

THE BLOCKADE OF PERU AND BOLIVIA BY CHILE 1879-1884

Beginning in 1879, Chile used a vastly superior fleet to blockade the coasts of Peru and Bolivia. This Chilean Fleet had two British built battleships, giving it sea power greatly superior to that of the combined fleets of Bolivia and Peru. This superiority was demonstrated by an attempt by the Peruvian battleship HUASCAR to break the blockade in 1879. The Chilean Fleet was concentrated, which resulted in the destruction of the HUASCAR. Eventually, the entire Bolivian coastline, in addition to key Peruvian cities, were captured as a result of land operations conducted in concert with the blockade.(7)

THE SPANISH-AMERICAN WAR 1898

The Spanish strategy, early in the Spanish-American War, included a plan for the Spanish to conduct a blockade of the coast of the United States. However, Spanish Admiral Cervera was convinced that this would not succeed due to the poor condition of his ships, the lack of strong advance bases and the lack of logistics support to sustain his fleet over such a long distance.(8)

Instead of attempting a blockade of the American coast, Cervera's fleet evaded the American Fleet and sailed into Santiago Bay, Cuba on May 19, 1898. On May 28, the American Fleet, under Admiral Sampson, arrived on station

and trapped the Spanish Fleet inside the bay. However, the American Fleet was unable to enter the harbor and engage the Spanish due to the narrow channel protected by mines and shore batteries.(9,10) An attempt by American forces to sink a ship in the channel failed. This would have blocked any escape by Spanish ships, however, the ship was discovered by the shore batteries and was sunk outside the channel.(11) Admiral Sampson found himself in a stalemate and requested the assistance of the Army to overcome the shore batteries. Because of a lack of unity of command and a failure to clearly communicate between the Army and the Navy, the Army got bogged down in an attempt to take the city instead of the batteries. In an attempt to resolve the situation, Sampson sailed to meet with General Shafter, the Army commander.(12) Following Admiral Sampson's departure, the Spanish Fleet attempted to escape, and was pursued by the American Fleet. The American Fleet, with four battleships and two armored cruisers, possessed vastly superior sea power when compared with the four armored cruisers and two torpedo boats of the Spanish Fleet. As a result of this superior sea power, the Americans were able to destroy the Spanish Fleet. Within two weeks, Santiago fell to the Americans due to continued naval bombardment and a shortage of food inside the city.(13,14)

THE DECLARATION OF LONDON 1909

In 1909, a conference was held in London to attempt to solve the dilemma resulting from the requirement for a blockade to be close to be considered effective. The resulting declaration defined distinctions between absolute contraband, conditional contraband and free goods. The declaration also applied the doctrine of continuous voyage only to absolute contraband. The provisions of this declaration would have allowed a belligerent to tranship everything, except munitions and other obvious war goods, through a neutral. Additionally, those goods would be immune to seizure.(15,16)

Strict adherence to this declaration would have significantly aided the Germans in World War I. As a result, the British did not ratify the declaration. However, the British initially adhered to the provisions of the treaty for a brief time. Thereafter, they only adhered to the rules as they desired to interpret them.(17)

WORLD WAR I: THE BRITISH BLOCKADE OF GERMANY

As previously mentioned, the JUENE ECOLE theory, prior to World War I, stated that the close blockade was no longer possible due to the advent of the submarine and torpedo. However, at the start of World War I the British initiated a distant blockade of Germany by positioning ships in Scapa Flow and Rosyth. Their superior sea power positioned at anchorages astride the exits from the North

Sea, the British effectively trapped the German High Seas Fleet in port. This action was similar in concept to Nelson's anchorages on the flanks of enemy transit routes discussed in Chapter Three. This strategy also left the British Grand Fleet in positions offering more protection from enemy submarines and assisted the British in protecting their merchant fleet from attack by surface raiders.(18) One drawback experienced by the British was their inability to interdict all shipping due to periods of reduced visibility in the North Sea.(19) In effect, this blockade had the same purpose as the close blockades conducted by Admiral Nelson in the late eighteenth century and early nineteenth century. Its purpose was to draw the German Fleet out of port and into the North Sea where it could be destroyed using the superior sea power possessed by the Royal Navy. Although the Germans were not defeated at the Battle of Jutland in May and June of 1916, this strategy was a success, due to the overall inactivity of the German Fleet which generally remained inport in order to avoid confronting the British main body.(20)

To assist them in their blockade and to help control neutral shipping, the British announced that the area between the James Estuary and the Belgian coast was mined. In order for a ship to get directions through the minefields, it had to stop at a British port and clear contraband control. In addition, the British also declared the ocean area extending from Ireland borway, along with the

North Sea, a war zone. In conjunction with this declaration, the British detailed one safe passage through the area. The British then relied upon the Tenth Cruiser Squadron for contraband control. (21)

On May 15, 1917, an Austrian squadron consisting of three light cruisers and two destroyers attempted to breach the allied blockade by breaking out of the Straits of Otranto. This force did succeed in sinking fourteen armed trawlers, a destroyer and two merchantmen of the allied fleet. However, this Austrian squadron did not possess sufficient sea power to successfully challenge the blockading fleet and turned back into the straits. (22)

As the war and the British blockade continued, Germany was relying on increasingly short rations. Equipment, materials and supplies in virtually all segments of Germany industry were wearing out. Germany was somewhat successful in offsetting these shortages through effective stockpiling, development of substitute materials and importing items through neutrals. To some degree, the development of the submarine's effectiveness also helped offset the British blockade. (23,24)

THE TURKISH BLOCKADE OF THE DARDENNELLES 1915

In 1915 the Turks closed the Dardennelle Straits which prevented any Russian trade out of the Black Sea. This action kept the Russians from supplying ammunition to the allies. In conducting the blocking of the Straits, the Turks used extensive mining and shore batteries. Along with

those tools, the Turk's determined fighting skills ashore successfully stopped a naval assault and a subsequent allied amphibious assault on the Peninsula of Gallipoli. This successful Turkish operation forced the allies to withdraw from the Peninsula. In the process of this action, three British battleships and one French battleship were sunk by mines. (25)

WORLD WAR I: GERMAN EFFORTS AGAINST BRITISH SHIPPING

In World War I, the British were dependent for survival on their ability to import food and raw materials. In general, the allies' command of the seas enabled Britain to get these supplies from their empire and from the United States. This was one of the crucial factors which determined the outcome of World War I. The Germans attempted to strangle Britain by using submarines and surface raiders to interdict these lines of communication. (26,27)

In many ways the efforts of these U-boats and surface raiders could be termed commerce raiding. On the other hand, they also displayed characteristics of conducting a distant blockade. In any event, these efforts made a strong impact on the allied war effort. The first German U-boat operations were conducted against British blockading ships. These operations met good success with the sinking of the cruisers ABOUKIR, HOGUE and CRESSY. However, these sinkings did not directly improve Germany's

strategic position. Therefore, the U-boats and surface raiders concentrated their efforts on the sinking of neutral shipping. Although large quantities of tonnage were sunk by the Germans, these operations became increasingly interdicted by the allies. The most effective tool that the allies found against attack by U-boats was the use of convoys. (28,29)

THE CONTROVERSY OVER BELLIGERENT RIGHTS AND
FREEDOM OF THE SEAS BETWEEN WORLD WAR I
AND WORLD WAR II

Differences of opinion between Britain and the United States over the rights of neutrals and belligerents and the concept of freedom of the seas had been an issue between those countries since 1783. As the world's dominant sea power at the close of World War I, Britain was keenly interested in maintaining the rights of belligerents and the capability to conduct economic warfare on the high seas. As a trading neutral, however, the United States had a key interest in protecting the rights of neutrals. (30) This concept was listed as the second of President Wilson's fourteen points, which stated:

Absolute freedom of navigation upon the seas, outside territorial waters, alike in peace and war, except as the seas may be closed in whole or in part by international action for the enforcement of international covenants. (31)

If this point was literally interpreted, it prevented the use of blockades and the use of searches and seizures of contraband. This limited the British advantage

of superior sea power and the British were successful in removing it from the peace conference agenda.(32)

Although the British tried to ease the friction over this issue with the Americans, they were serious about maintaining their ability to engage in economic warfare. In the following years, war activity leading to World War II resulted in America's increased involvement in world issues. By the time the United States entered the war in 1941, the issue of neutral rights had basically been abandoned.(33)

THE SPANISH CIVIL WAR 1939

During the Civil War in Spain, a fleet under the control of the Nationalists attempted to blockade that section of the Spanish coastline under the control of the Republicans. However, the entire Nationalist Fleet, which consisted of only eight ships and one submarine, did not contain enough assets to make the blockade effective.(34)

PRESIDENT FRANKLIN D. ROOSEVELT AND THE PLAN FOR A NAVAL QUARANTINE OF JAPAN

As early as the fall of 1937, President Franklin D. Roosevelt envisioned a long range blockade, or quarantine as he referred to it, against Japan. He alluded to his ideas on this "quarantine of aggressors" in a speech he gave in Chicago on October 5, 1937.(35) Roosevelt saw that a quarantine of Japan would cut off trade with British and American markets. This in turn would prevent Japan from gaining further strength, halt any continued Japanese

aggression and reduce the Japanese threat to American security.(36) Roosevelt also envisioned this quarantine of Japan as a possible means of preventing war by bringing Japan economically to her knees.(37)

Roosevelt believed that the quarantine was a way in which the United States could engage in hostilities, without declaring war, in order to prevent war. If it did not prevent war, then Roosevelt saw it as a way to force the axis powers to declare war on the United States rather than vice versa.(38) In either event, it was a method of breaking America out of its isolationist position.

Roosevelt's feelings about imposing a distant blockade of Japan were further supported by the sinking of the USS PANAY, in the Yangtze River, by Japanese aircraft on December 12, 1937. This action also convinced Roosevelt to confer with the British in order to establish a joint blockade of Japan. As a result, Roosevelt sent Captain Royal E. Ingersoll, a highly respected American naval officer, to England. While in England, Captain Ingersoll began working out the initial details for the establishment of the quarantine against Japan by Britain and the United States.(39)

In a discussion with French Senator Baren Amaury de la Grange, Roosevelt gave the following description of how he envisioned that the quarantine would be imposed:

Formerly a blockade was carried out inside the limits of territorial waters. Now it could be established 2,000 miles from the Japanese coast. The

English fleet, depending for support upon Hong Kong, Indo-China and the Philippines, would prevent any Japanese ship from crossing this line towards the south, while the American Fleet would bar the route to the north, from Manilla to Alaska.

Japan could not hold out more than a year and a half. It has petrol and rubber for about that length of time.(40)

Roosevelt soon had to abandon his plan for a quarantine of Japan due to three major factors. First of all, American isolationism was continuing to grow and Roosevelt did not have sufficient national will to support such an action. Second, British Prime Minister, Neville Chamberlain, preferred to appease Japan, Germany and Italy rather than confront them. Chamberlain felt that a quarantine of Japan could have led directly to a three front war for Britain. Third, Anthony Eden, Britain's Foreign Secretary, who fully supported such an action and was Roosevelt's key to British cooperation, resigned on February 20, 1938.(41)

WORLD WAR II: THE BRITISH BLOCKADE OF GERMANY

Prior to the outbreak of hostilities in World War II, many believed that the allies were fairly secure behind the Maginot Line. Therefore, many of the allies felt that they could simply drive the Germans to desperation through the relentless pressure of a naval blockade. They anticipated that the Germans would then throw away their armies in a desperate and futile attack.(42)

As a result of this theory, the British initiated a blockade of Germany following the declaration of war on

September 3, 1939. As they had done in World War I, the British covered all exits from the North Sea and Baltic Sea with cruiser patrols while the home fleet remained at Scapa Flow in order to deal with any breakout.(43)

As in World War I, Germany again proved that a continental power is not as susceptible to blockade as an island nation such as Japan or England. German industry was significantly weakened by shortages during World War II caused by the blockade, however, the Germans were able to develop substitutes to counteract these shortages. The development of synthetic gasoline and synthetic rubber provided two critical items necessary for the Germans to carry out a long war.(44)

Additionally, German ships soon found a way to avoid this blockade. They would quickly cross the Skagerrak under the protection of their own air cover. Then, ignoring Norway's neutrality, they would follow the sheltered passages along the Norwegian coast. These passages, known as the Leads, would hide their position until the ships decided to make a break to the Atlantic.(45) To prevent those German ships from escaping, the British decided to place mines in the Leads. However, the German invasion of Norway prevented the mining operation.(46)

As the war continued, the effectiveness of the allied blockade increased. By the end of the war, the allies were successful in establishing a close blockade of German.(47)

WORLD WAR II: THE GERMAN CAMPAIGN AGAINST SHIPPING

As they had been in World War I, Great Britain's existence hinged on the importation of food and raw materials. In World War II, the Germans again attempted to strangle the British. To accomplish this, they decided to employ a combination of submarines, German air forces, surface ships and mines.(48)

Karl Donitz, head of the German submarine force, estimated that 300 U-boats were needed to starve England. However, this plan differed with the ideas of the German Naval Commander-in-Chief, Admiral Raeder. Raeder's Plan Z was formulated to achieve a balanced fleet by 1948 and called for a much lower number of submarines. As a result, Germany entered the war with only 56 submarines. These U-boats were to be supplemented by the pocket battleships and cruisers of the German Fleet who were supposed to attack enemy shipping on the high seas.(49)

German efforts against allied shipping had a dramatic effect on the allied war effort. Between January and July of 1942, fourteen out of 50 operational German U-boats sank 450 ships.(50) The allies lost one and one half times more tonnage than they lost during World War I. Submarines alone sank 14,155,000 tons of allied shipping.(51)

Eventually, the allies were able to counter the effectiveness of these U-boats. Allied success resulted

primarily from the fact that there were not enough U-boats, however, there were a number of allied actions which led significantly to the defeat of the U-boats. These actions included:

- 1) The increased use of convoys.
- 2) An increased number of surface escorts to defeat the wolf packs of eight to twenty U-boats that hunted the convoys.
- 3) The use of aircraft from escort carriers to spot and attack U-boats.
- 4) The use of allied submarines to hunt and attack German U-boats.
- 5) The use of mines.
- 6) The development and use of sonar, which was referred to as ASDIC by the British.
- 7) The use of High Frequency Radio Direction Finding (HF/DF) equipment. This was used to cross fix the bearings, detected from numerous locations, of High Frequency (HF) radio transmissions from German submarines. The German U-boats, which apparently used HF radio communications often, could then be generally located using these cross fixes. (52,53)

WORLD WAR II: THE BLOCKADE OF JAPAN

One of the basic premises behind the strategy against Japan in World War II was to weaken Japan by cutting of the flow of vital materials, primarily oil, from her

southern resources area.(54) American submarines from Guam, allied submarines from Subic Bay and American aircraft based in Luzon and Okinawa were eventually used as the primary tools to accomplish this element of the overall strategy. Additionally, submarines operating in the sea of Japan prevented coal and iron from reaching Japan from the continent. This blockade, combined with among other things, raids on Japan by the Third Fleet, the entry of Russia into the war and the dropping of the two atomic bombs, led to Japan's capitulation.(55)

THE KOREAN WAR 1950-1953

A blockade of China during the Korean War had many advocates in the United States. In joint service hearings in May and June of 1952, Admiral Forest Sherman discussed the vulnerability of China to a blockade. He pointed out that 2,500 foreign flag ships per year entered ports in China. He also highlighted the fact that China's economy was mainly rural, but that China's urban population and military were largely dependent on overseas supply.(56) Admiral Sherman felt that an effective blockade would force China to rely completely on the Soviet Union for supplying the war effort. He believed this would place a great strain on the economy of the Soviet Union. Additionally, this support would have to travel via the trans-Siberian railroad which had a capacity of only 17,000 tons per day. This amount was less than what could be carried by two cargo ships.(57)

Despite Admiral Sherman's views, a blockade of China was not permitted, because there was never a formal declaration of war. Under international law, it was argued, the rights of blockade and of visits and search of merchant ships is only given to a belligerent in a formally declared war.(58) However, the United Nations by charter can institute a blockade against an aggressor without the declaration of war. This point was also advocated by Admiral Sherman, but to no avail.(59) One possible reason for this lack of action, was the position held by one of the United States' closest allies, Great Britain. The British were against the blockade of China because of the large amount of trade that was coming out of China via Hong Kong. The British also were afraid that a blockade of China might lead to an unlimited war.(60)

THE ALGERIAN EMERGENCY 1954-1962

The French Navy enjoyed some success in interdicting contraband bound for Algiers during the Algerian emergency from 1954 to 1962. This success can be primarily attributed to the French Navy's ability to visit, search, re-route and seize vessels. During this crisis, the French Navy visited 4775 ships, searched 1300, re-routed 182 and captured 1.(61)

THE VIETNAM WAR

In August 1965, the Joint Chiefs of Staff envisioned a possible blockade of North Vietnam and of its logistic lines of communication.(62) However, many regarded this idea

as infeasible due to redundant land routes that linked North Vietnam with China and the Soviet Union.(63) Additionally, many felt that a blockade could not be implemented due to the lack of a formal declaration of war. It was therefore decided, that strategic bombing of North Vietnam would be used instead of the naval blockade.(64) There is some argument that strategic bombing represented a greater violation of international law, in the absence of a war declaration, than did the imposition of a naval blockade.(65) Furthermore, the mining of Haiphong Harbor in May 1972 was chosen over a blockade because it was viewed as less provocative.(66)

THE INDO-PAKISTANI WAR 1971

During the Indo-Pakistani War in December 1971, India imposed an effective blockade of East Pakistan. Utilizing aircraft from the carrier VIKRANT, an Indian force under Vice Admiral Krishnan completely isolated East Pakistan by blockading the Bay of Bengal. Due to India's ability to gain complete air superiority and local command of the seas, forces in East Pakistan were forced to surrender within a few weeks.(67)

THE YOM KIPPUR WAR: THE EGYPTIAN BLOCKADE OF THE STRAITS OF BAB EL MANDEB 1973

During the Yom Kippur War in October 1973, the Egyptians attempted to blockade the Straits of Bab El Mandeb at the junction between the Red Sea and the Gulf of Aden.

Because of the nature of the hostilities, many believed that the Egyptians had a legal basis for establishing this blockade. However, an American naval task force, formed around the carrier USS HANCOCK, was sent to the area to protect neutral American shipping in the Straits. In view of the superior sea power possessed by the American task force, and in the face of potential conflict, the Egyptians abandoned the blockade. (68)

CHARACTERISTICS

There were 23 characteristics or factors, affecting blockades, that were identified during this period. These factors included:

- 1) Superior sea power was critical to the success of a blockading force.
- 2) The successful outcome of a naval blockade depended on land warfare operations conducted in conjunction with that blockade.
- 3) Naval blockades were less successful if the enemy nation was able to develop synthetics or substitutes for critical import items.
- 4) The submarine was used effectively as a part of blockading forces.
- 5) An island nation was more susceptible to blockade than a continental power.
- 6) The lack of a declaration of war was detrimental to the ability of a nation to impose a blockade. The use of a quarantine, instead of a blockade, and the use of a United

Nations blockading force were both identified as potential means of getting around this issue.

7) The ability of the blockader to use or react to developments in technology had a significant impact on the outcome of blockades.

8) The use of convoys and surface escorts negatively impacted on the submarines' ability to conduct a blockade.

9) Aircraft played an important role in defeating submarines operating as part of a blockading force.

10) Aircraft, particularly carrier based aircraft, were successful as part of the blockading force. This included roles in both search and attack.

11) Gaining air superiority could be an important factor in the success of a blockading force.

12) Public opinion and national will became important factors in decisions to implement blockades.

13) Support by allies could effect the ability to implement blockades.

14) Sheltered passages within a blockade zone were disadvantageous to a blockading force.

15) Defensive, Nelsonian blockades were effective as key components of the strategies of some nations.

16) Defensive, Nelsonian blockades which used anchorages on the enemy's flanks or astride the exits of an enemy fleet, were employed successfully.

17) Reduced visibility was detrimental to a blockading force.

18) The use of artificial obstacles, such as mines, could enhance the success of a blockading force.

19) The declaration of war zones could assist in the control of neutral shipping and could enhance a blockade.

20) Inadequate land transportation systems could enhance a blockade. Redundant land routes could detract from a blockade.

21) The development of international law influenced the scope and means in which blockades were conducted. The impact of law on a blockade was often determined by how a law was interpreted and adhered to by the nation possessing the greatest sea power.

22) Block ships, designed to be sunk in a channel and prevent ships from entering or leaving port, did not work.

23) The ability of a blockading force to visit, search and seize vessels could directly effect the outcome of blockades.

CONCLUSIONS

The dramatic developments in technology had a strong impact on blockades conducted during the age of iron and steel. The emergence of new weapons systems, such as submarines and aircraft, changed the way in which blockades were implemented. No longer was the close blockade the only means of conducting a blockade. Although many believed that an effective blockade was no longer possible, the naval

blockade continued to be used successfully into the late twentieth century. The next chapter analyzes the blockade of Cuba during the Cuban Missile Crisis in 1962.

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CHAPTER 6

THE CUBAN MISSILE CRISIS 1962

INTRODUCTION

The blockade of Cuba by the United States in October of 1962 is important to the discussion of blockades because it represents the most recent major blockade operation. Although this operation was called a quarantine instead of a blockade, this was primarily a result of legal semantics rather than substance. A discussion of this legal issue follows later in this chapter. In many ways, the Cuban missile blockade represented more of a first step in a political process than it represented a true blockade as a military tool. This concept is brought out as the sequence of events is described, also later in this chapter. Even though this operation was not a classic blockade, there are many lessons that can be learned from the way in which it was implemented.

SEQUENCE OF EVENTS

On 14 October 1962, a high flying U-2 observation aircraft returned to the United States with photographic confirmation of medium range missile sites in advanced states of construction on Cuba. (1,2) These sites were being

built by the Soviet Union despite numerous warnings from the United States against installing offensive missiles in Cuba and numerous Soviet assurances that they would not.(3) Exactly why the Soviet Union decided to pursue the installation of these missiles may never be known. However, it has been speculated that Chairman Khrushchev may have perceived that President Kennedy's decision not to use armed forces during the Bay of Pigs incident showed a lack of nerve. As a result, he may have decided to gamble on placing intermediate range nuclear weapons in Cuba.(4) Others speculate that Chairman Khrushchev placed the missiles in Cuba in order to use them as a bargaining counter against the United States at a summit or during a confrontation at the United Nations.(5) It is also possible that the Soviets viewed these weapons as defensive in that they helped to prevent an invasion of Cuba instead of being offensive in nature.(6) This may explain why the Soviet Union did not seriously protest American Jupiter missiles in Turkey prior to the crisis. Other explanations include a plan to redefine the Berlin situation, a plan to strengthen the Soviet position in the communist world through a bold move, a plan to hand the United States a significant political blow and an attempt to alter the appearance of the world balance of power.(7)

In any event, the United States was left with six basic alternatives to deal with the situation.(8) These alternatives were:

1) Do nothing initially, then confront Soviet officials in the United States with proof and demand removal.

2) Send an emissary to Chairman Khrushchev and privately demand removal.

3) Arraign the Soviet Union and Cuba before the United Nations.

4) Conduct an embargo or blockade of Soviet shipments to Cuba.

5) Conduct a surprise attack to eliminate the missiles in Cuba.

6) Invade Cuba.

Discussions of the Executive Committee eventually narrowed the alternatives down to a choice between conducting an air strike or conducting a blockade.(9) Of these two choices the blockade had a number of advantages as well as disadvantages. On the positive side, it directly confronted the Russians instead of the Cubans. Secondly, it could be escalated in severity. Additionally, it utilized American sea power in waters already controlled by the United States Navy. It was also seen as less provocative and less dangerous than an air strike or invasion. On the negative side, the blockade might have caused friction with other maritime nations who traded with Cuba. For example, Great Britain might have seen it as an infringement on the freedom of the seas. Another negative aspect was that the blockade is considered legally as an act of war.(10)

On the afternoon of 20 October 1962, President Kennedy made the decision to implement the blockade.(11) The key reasons that the blockade was chosen is that it bought time and allowed for possible movement to more forceful alternatives. These alternatives included adding additional items to the quarantine or contraband list, including POL items. Additional alternatives also included escalating to an air strike or invasion.(12) In fact, the blockade was stressed as only the first step, which implied that an air strike or invasion would be initiated if the blockade was violated or if missile installation continued.(13) The blockade was also seen as a way to weaken the opponent while seeking other solutions.(14)

In many respects, the blockade of Cuba could never truly work because offensive missiles were already on the island and were getting close to being operationally ready. However, the imposition of the blockade demonstrated the willingness of the United States to escalate the crisis to a local conventional naval engagement.(15) So, at 10 o'clock E.D.T. 24 October 1962, the blockade was placed into effect.(16)

The authority to stop or board vessels remained with the President in order to give more time and flexibility to Soviet leaders. As a result, a number of ships were allowed to proceed across the blockade line after merely identifying themselves. In fact, the first boarding did not occur until 26 October when the MARCULA, under Soviet charter, was

boarded, inspected and allowed to pass.(17) The most crucial time of the blockade occurred shortly after 10 o'clock E.D.T. 24 October when the Anti-Submarine Warfare (ASW) capable aircraft carrier, USS ESSEX, was sent to intercept two Russian ships approaching the blockade line. The two Russian ships, the CAGARIN and KOMILES, were being escorted by a Russian submarine and were expected to reach the blockade line between 10:30 and 11 o'clock E.D.T. The plan called for ASW aircraft from the ESSEX to drop small charges on the submarine, as it reached the blockade line, to force it to surface.(18) Tensions mounted over this potential conflict at sea and the possibility that it could escalate into a nuclear exchange. However, it was later reported, by United States patrol aircraft, that the Russian freighters were stopped or turning back short of the blockade line. At this point Secretary of State Dean Rusk made his famous statement, "We're eyeball to eyeball and I think the other fellow just blinked."(19)

As the blockade continued, plans were made to escalate the level of force required to reach the objective of removal of the missiles. Discussions were held concerning the expansion of the quarantine list. Additionally, the United States was prepared to attack Cuba on 30 October if the Soviet Union had not announced a withdrawal of the missiles.(20) Tensions were further heightened by two incidents on 27 October involving American U-2 reconnaissance aircraft. One aircraft was shot down by

surface-to-air missiles over Cuba while the other was discovered violating Soviet airspace in the Chokotka Peninsula area. (21,22)

Throughout the unfolding of these events, correspondence was exchanged between President Kennedy and Chairman Khrushchev through official and unofficial channels. Following a series of letters and statements between the two world leaders, an agreement was finally reached on 28 October. This agreement called for the Soviet Union to dismantle the missiles and remove them from Cuba. The United States then agreed not to invade Cuba. (23)

RESULTS

There were numerous results of this crisis and its subsequent agreement. In many ways, the Soviet Union was viewed as humiliated and Khrushchev was discredited. (24) However, if the main objective of the Soviet's plan was the defense of Cuba, the plan succeeded because the United States agreed not to invade Cuba. (25) As a result of the successful use of American sea power in this crisis, as well as off Lebanon, Quemoy and during the Korean War, Soviet realized that they could not totally rely on submarines to obtain their objectives. This lesson proved to be a significant factor in the Soviets' decision to build a substantial surface Navy capable of more than coastal defense. (26)

As mentioned earlier in this chapter, the majority of the missiles were already in Cuba and the blockade only

showed American determination.(27) This raises the question of why the Soviets agreed to remove the missiles. It also raises the question of why the Soviet Union did not demand more substantial concessions from the United States, such as removal of Jupiter missiles from Turkey. Many felt that Khrushchev perceived he had no choice between a nuclear confrontation and capitulation and therefore agreed to remove the missiles. Many also felt that Kennedy agreed not to invade Cuba just to take the sting out of this defeat.(28) Secretary of Defense McNamara believed that the Soviets removed the missiles because they came to the realization that they faced the full military power of the United States, including its nuclear arsenal. He saw this as the only reason the Soviets made these concessions.(29)

NAVAL BLOCKADES IN COMBINATION WITH OTHER OPERATIONS

It is clear that the blockade of Cuba alone was not enough to obtain United States objectives during the crisis.(30) Although the blockade did prevent further missile shipments to Cuba, it did not stop construction on the sites of the missiles already on the island.(31) The removal of the missiles already in Cuba was forced through the threat of invasion or air strike.(32) Had the Soviets not been afraid of an invasion or air strike, they may have been willing to wait out the blockade or attempt blockade running in order to supplement the already substantial missile capability on the island.(33)

LEGAL JUSTIFICATION

In deciding between conducting an air strike or a blockade, a great deal of the executive committee's discussion revolved around the legal aspects of imposing a blockade.(34) However, in the long run, the legal aspects had less to do with the final decision than the fact that the blockade would avoid killing Russians and provide the Soviet Union hierarchy time to make a rational decision.(35) Therefore, it became more of a question of how to legally legitimize a blockade or make it more legally palatable.

One way to make the blockade more palatable was to call it something other than a blockade. Leonard C. Meeker, Deputy Legal Advisor to the Secretary of State, borrowed the term quarantine from Franklin D. Roosevelt's "Quarantine-the-Aggressor" speech.(36) A quarantine would amount to a use of force, but did not amount to a declaration of war.(37) This met the needs of the committee, and the blockade was officially termed a quarantine.

In order to legitimize the blockade, it was decided to get the backing of other countries in the area. In a meeting of the Organization of American States (OAS) council on 23 October, the council unexpectedly voted unanimously 19-0 in support of the United States actions, with only Uruguay abstaining.(38) This unanimous vote surprised the Russians and in effect justified the blockade and the actions of the United States.(39) Robert Kennedy, then

Attorney General, summed up this concept in the following statement:

It was the vote of the organization of American States that gave a legal basis for the quarantine... it...changed our position from that of an outlaw acting in violation of international law into a country acting in accordance with twenty allies legally protecting their position.(40)

HOW THE BLOCKADE WAS CONDUCTED

During an argument between Secretary of Defense McNamara and Admiral Anderson, Chief of Naval Operations, McNamara made it clear that the blockade was a military action with a political objective. He stated that the objective of the blockade was not to kill Russians, but rather to send a political message to the Kremlin.(41) The Navy set about accomplishing this objective by drawing an arc 500 miles from the eastern tip of Cuba. This arc was beyond the operating range of MIG aircraft and was also at a distance from Cuba that would provide Washington sufficient of decision time in determining which ships to stop and board. Along the arc were placed nineteen ships consisting primarily of destroyers backed up by cruisers. These ships, from the United States Second Fleet, comprised Task Force 136 operating under the direction of Vice Admiral Alfred G. Ward.(42) By 22 October approximately 180 ships, including the special blockade Task Force 136, were deployed in the Caribbean to support the operation.(43)

The night before the blockade was to be put into effect, President Kennedy drew the outer boundary of the

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The night before the blockade was to be put into effect, President Kennedy drew the outer boundary of the

blockade in closer to Cuba than the 500 miles designated by the Navy, in order to give the Russians more time. The shorter boundary was suggested by British Ambassador David Ormsby-Gore. However, later data on the intercepts of Soviet ships, such as the MARCULA on 26 October, indicates that the Navy may not have actually changed the blockade line. (44)

LESSONS LEARNED

The Cuban blockade was primarily a political tool, and as such, was not of itself completely effective. However, there are a number of lessons that can be learned about contemporary blockades from the way in which it was implemented. Two of these items have already been discussed in this chapter. The first of these lessons was that a blockade by itself cannot be effective. The naval blockade must be combined with another operation such as invasion or air strike or the threat of that operation in order to succeed. The second concerns the idea was that a naval blockade can be legally legitimized, without a declaration of war, if it is supported by a significant percentage of world opinion.

LIMITED NAVIGATIONAL CHANNELS OR APPROACHES FACILITATES A BLOCKADE

Another concept that can be learned from the Cuban blockade deals with navigational channels or approaches. As ships approach Cuba from the mid-Atlantic, they must pass

through five navigable channels.(45) The United States Navy was able to concentrate the blockading force in these limited approaches.(46)

SPECIFIC OBJECTIVES

Another important idea brought out in the Cuban blockade is that stating specific objectives assists the blockading force. The Quarantine Proclamation listed specifically what items were to be prevented from entering Cuba. The following list is taken from the Quarantine Proclamation:

...surface-to-air missiles; bomber aircraft; bombs; air-to-surface rockets and guided missiles; warheads for any of the above weapons; mechanical or electronic equipment to support or operate the above items and any other class of material hereafter designated by the Secretary of Defense for the purpose of effectuating this proclamation.(47)

These specific objectives, along with the wording in the Proclamation, also allowed the United States to escalate the blockade to additional items. Of additional items discussed, POL was viewed by the Executive Committee as having the highest potential of leading the Soviets towards action.(48)

ASW CAPABILITY OF THE BLOCKADING FORCE

Another significant issue from the Cuban blockade came in the area of Anti-Submarine Warfare (ASW). As previously discussed in this chapter, the first encounter at sea during the crisis involved two ships escorted by a Russian submarine.(49) At a Navy League banquet on November

9, 1962, Admiral Anderson, Chief of Naval Operations, alluded to the presence of a number of Russian submarines in the Caribbean and Atlantic during the missile crisis. He went on to add that this had been one of the finest opportunities to exercise the Navy's ASW forces. He claimed that each of the six submarines had been forced to surface without any weapons being fired. (50)

These events highlight the difficulty a blockading force may have in stopping ships under submarine escort. (51) These events also highlight the necessity for a blockading force to possess a significant ASW capability.

BLOCKADE OF AIR ROUTES

Another lesson learned from the Cuban blockade concerned transportation of contraband by air. An item of concern during the crisis was the potential for the delivery of additional nuclear war heads by aircraft. To prevent this possible breach of blockade, the State Department sent instructions to various American ambassadors. These ambassadors were to persuade their host governments, where possible, to deny landing rights to any Soviet or Soviet bloc aircraft enroute to Cuba. (52)

SURPRISE AND GAINING THE INITIATIVE

One of the key reasons that the blockade of Cuba was successful, as a political tool, was that it surprised the Russians and caught them off guard. In effect, it seized the initiative away from the Russians and gave it to the

Americans. As a result, the Russians were in a reactive role for the remainder of the crisis and never regained the lead. (53)

SWIFTNESS

An additional concept present during the Cuban missile crisis concerns the swiftness of the blockading fleet to establish the blockade line and react to the situation. Following notification of the Commander, Second Fleet of the impending blockade on Saturday afternoon, the entire blockade task force was well on its way, at flank speed, to take station by Monday afternoon. This was accomplished despite the fact that many crewmen were on leave or liberty over the weekend. Crews were rounded out by utilizing men from ships in restricted upkeep and maintenance to fill in for the missing men. (54)

GOOD INTELLIGENCE

The requirement for good intelligence was also demonstrated in October 1962. Prior to the time the blockade of Cuba was officially put into effect, there were 25 Soviet ships at various locations throughout the Atlantic that were headed for Cuba. United States Navy reconnaissance aircraft had spotted all of these vessels and had already noted their deck cargo, position, speed and probable destination. (55) This significantly assisted the blockading force who could position themselves for

intercept. This also highlighted another important concept, which was the growing importance of aircraft to the blockade.

SUPERIOR SEA POWER

As mentioned earlier in this chapter, the United States Navy had approximately 180 ships on the blockade line or supporting the blockade. This force consisted primarily of destroyers, cruisers and carriers.(56) With this overwhelmingly powerful force, the Russians could not have seriously challenged the blockade, particularly in this area which was firmly under the control of the United States Navy.

A COMBINED ARMS NAVAL FORCE IS REQUIRED TO ESTABLISH OR CHALLENGE A BLOCKADE

Through the Russian's experience during this crisis, as well as incidents in Lebanon and at Quemoy, they realized that a submarine force alone was not effective. In order to have effectively challenged the Cuban blockade they would have needed a strong surface Navy to back up their submarine force.(57)

CHARACTERISTICS

There were twelve characteristics or factors concerning blockades that emerged from the Cuban missile crisis. These factors included:

- 1) A blockade by itself was not effective in obtaining required results. It must be combined with other

operations or the threat of other operations such as invasion or air strike.

2) The naval blockade must be legally justified as through a declaration of war. In the absence of a declared war, it could be legally legitimized if it had the support of a significant percentage of world opinion.

3) Limited navigational channels or approaches facilitated the blockade.

4) The outlining of specific blockade objectives assists the blockading force.

5) The blockading force was required to possess the capability to conduct effective ASW operations.

6) The blockade had to be able to close air routes into the blockaded nation.

7) The use of surprise by the blockading nation and its ability to gain the initiative played an important role in the blockade.

8) The ability of the blockading force to utilize swiftness contributed to the outcome of the blockade.

9) Good intelligence was important to the blockading force.

10) Superior sea power, particularly in areas under firm control of the blockading force, significantly enhanced the blockade.

11) A combined arms naval force was required to establish or challenge a blockade.

12) Aircraft played a significant role in the

blockading force as a surveillance platform and an interceptor.

CONCLUSIONS

The blockade of Cuba during the Cuban Missile Crisis in 1962 represents the last major blockade operation conducted. This blockade was officially termed a quarantine, mainly for the purpose of circumventing international law. Although this blockade was actually the first step in a political process, there are numerous important factors that can be derived from the way in which it was implemented. The next chapter contains the findings and conclusions of the study.

ENDNOTES

(1) E. B. Potter, Sea Power: A Naval History (2d ed.; Annapolis, MD: Naval Institute Press, 1981), p. 371.

(2) Elie Abel, The Missile Crisis (Philadelphia and New York: J. B. Lippincott, Company, 1966), p. 29.

(3) Ibid., pp. 19-20.

(4) Potter, p. 371.

(5) Graham T. Allison, Essence of Decision: Explaining the Cuban Missile Crisis (Boston: Little, Brown and Company, 1971), p. 43.

(6) Ibid., p. 47.

(7) Ibid., pp. 50-51.

(8) Abel, pp. 60-63.

(9) Ibid., p. 79.

(10) Ibid., p. 62.

(11) Ibid., pp. 93-96.

(12) Allison, p. 219.

(13) Ibid., p. 64.

(14) David Detzer, The Brink: Cuban Missile Crisis 1962 (New York: Thomas Y. Crowell, 1979), p.

(15) Allison, p. 63.

(16) Ibid., p. 129.

(17) Ibid.

(18) Ibid., p. 137.

(19) Potter, p. 372.

(20) Allison, p. 46

(21) Ibid., p. 106.

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(23) Abel, pp. 200-204.

(24) Potter, p. 372.

(25) Allison, p. 49.

(26) Potter, p. 372.

(27) Detzer, p. 134.

(28) Potter, p. 372.

(29) Allison, p. 65.

(30) Ibid., p. 64.

(31) Allison, p. 219.

(32) Ibid., p. 64.

(33) Robert A. Divine, The Cuban Missile Crisis (Chicago: Quadrangle Books, 1971), pp. 184-185.

(34) Abram Chayes, The Cuban Missile Crisis: International Crises and the Role of Law (New York and London: Oxford University Press, 1974), pp. 28-35.

(35) Abel, p. 73.

(36) Ibid.

(37) Chayes, p. 15.

(38) Abel, pp. 129-131.

(39) Chayes, pp. 44-45.

(40) Ibid., pp. 16-17.

(41) Allison, p. 131.

(42) Abel, p. 141.

(43) Ibid., p. 114.

(44) Allison, pp. 129-130.

(45) Detzer, p. 163.

(46) Abel, p.

(47) Ibid., p. 135.

(48) Divine, pp. 24-25.

- (49) Allison, p. 137.
- (50) Abel, p. 155.
- (51) Detzer, p. 133.
- (52) Abel, p. 136.
- (53) Allison, pp. 132-133.
- (54) Abel, pp. 142-143.
- (55) Ibid., p. 143.
- (56) Ibid., p. 114.
- (57) Potter, p. 372.

CHAPTER 7

FINDINGS AND CONCLUSIONS

INTRODUCTION

This study has sought to identify characteristics that have contributed to the success of past naval blockades. In so doing, this study has considered 41 naval blockades which occurred between 425 B.C. and 1973. Of these 41 blockades, 10 were actually periods of blockade. During these periods of blockade, more than one blockade actually occurred. An example is the Seven Years War, during which the British blockaded France. This period was counted as only one blockade, although it consisted of a series of blockades of various French ports on the Atlantic and Mediterranean coasts.

Of the 41 blockades studied, 13 were considered failures. The factors which contributed to these failures has also been included in this study. The study also includes 4 blockades, not included in the total figure of 41, which were contemplated but not implemented. The remainder of this chapter is devoted to an analysis of these characteristics.

COMMON CHARACTERISTICS

A total of 22 factors were found to exist in a significant number of the blockades considered in this study. These common characteristics were the key factors in the successful outcome of past naval blockades. Although all of these factors were not found in each blockade studied, these common commonalities merit consideration in future decisions to implement naval blockades. These common characteristics are:

1) Superior sea power was vital to an effective blockade.

2) A blockade by itself was not effective in obtaining required results. The successful outcome of a naval blockade depended on operations conducted ashore in conjunction with the naval blockade. These operations consisted of invasion by ground forces, air strikes, land campaigns or the perceived threat that any of these would be successfully used. Cooperation between Army, Navy and Air Forces significantly contributed to blockade effectiveness.

3) The ability to use or react to developments in warfare technology significantly impacted on the effectiveness of blockades. Blockades had to be able to counteract technology which had the ability to break blockades.

4) The development of international law influenced the scope and means in which blockades were conducted. How a law was interpreted and adhered to by that nation

possessing the greatest sea power, determined the impact of that law on the blockade in force.

5) Naval blockades had to be legally justified as through a declaration of war. In the absence of a war declaration, a blockade could often be legitimized if it had the support of a significant percentage of world opinion. The use of a quarantine, instead of a blockade, and the use of a United Nations blockading force were also identified as potential means of getting around the issue of a lack of war declaration.

6) Successful blockades depended greatly on the ability to resupply and repair the blockading ships.

7) The possession of strategic bases, by the blockading nation, near the blockade zone was important to the successful outcome of blockades.

8) Naval blockades were used effectively against nations with external interests and which were dependent on sea trade.

9) An island nation was more susceptible to a blockade than a continental power.

10) Blockades were often required to be conducted over long periods of time in order to eventually strangle or weaken an opponent.

11) The receipt of accurate and timely intelligence by the blockading fleet played a key role in the effectiveness of blockades.

12) Inadequate land transportation systems, into or within a blockaded nation, enhanced the effects of a blockade. Redundant land routes detracted from a blockade.

13) The use of artificial obstacles, such as mines, added to the effectiveness of blockading forces.

14) The control of blockade runners played a critical role.

15) The proper disposition of forces enhanced the effectiveness of blockades.

16) A combined arms naval force, consisting of aircraft, submarines and surface ships, became a requirement to establish or challenge an effective blockade.

17) Closing, or the control, of air routes into a blockaded nation became an important factor in the twentieth century.

18) Aircraft, particularly carrier based aircraft, became important parts of a blockading force. This included roles in both search and attack.

19) Gaining air superiority became an important factor in the success of a blockading force.

20) The submarine became an important tool of blockading forces.

21) Defensive, Nelsonian blockades which used anchorages on the flanks of enemy transit routes or astride the exits of an enemy fleet were used successfully. This allowed the blockading fleets to be in a position to respond

while being afforded greater protection. This also provided for crew rest and for ships' upkeep and repair.

22) Overcoming bad weather played a key role in a blockading force's ability to remain on station and conduct a successful blockade.

Of these 22 criteria, the first two, superior sea power and use of joint operations, were present in virtually every successful blockade studied.

SECONDARY CRITERIA

Additional criteria were identified which also contributed to or distracted from a number of blockades. Although they were not identified as affecting a majority of past blockades, they also warrant consideration. These secondary criteria are:

1) Public opinion and national will became important factors in decisions to implement blockades.

2) Limited navigational channels or approaches into a blockaded zone facilitated blockades. These limited approaches assisted in properly positioning blockading forces.

3) The training and experience gained by forces during long periods on blockade duty, significantly contributed to the ability of those forces to maintain an effective blockade.

4) Blockading forces had to possess the ability to conduct effective Anti-Submarine Warfare (ASW) operations.

5) Aircraft played an important role in defeating submarines operating as part of a blockading force.

6) The use of convoys, escorted by surface ships, negatively impacted on the submarine's ability to conduct blockade operations.

7) A limited number of major seaports within a blockaded nation enhanced blockades.

8) The capture of key seaports within the blockaded nation enhanced blockades.

9) Long coastlines, numerous harbors, extensive inland waterways and long estuaries were normally disadvantageous to blockades. However, these disadvantages could be offset with the use of superior sea power, the capture of enemy ports and the control of inland waterways.

10) The use of transfer centers near the blockade zone assisted blockade runners and weakened some blockades.

11) The ability to locate and utilize neutral ports and prize courts enhanced some blockades.

12) Sheltered passages within a blockade zone were disadvantageous to a blockading force.

13) The declaration of war zones assisted in the control of neutral shipping and could enhance a blockade.

14) Blockades were less successful if the enemy nation was able to develop synthetics or substitutes for critical import items.

15) The speed capability of the blockading ships often influenced the outcome of blockades.

16) Shallow draft vessels were used to break blockades if the blockading force did not include shallow draft vessels, or vessels able to intercept shipping in shallow water.

17) The ability of a blockading force to visit search and seize vessels could directly influence the outcome of blockades.

18) The outlining of specific blockade objectives assisted blockading forces.

19) The defensive, Nelsonian blockade formed a critical part of the strategies of many nations.

20) The use of deception could enhance a blockade.

21) The use of surprise by the blockading nation, along with its ability to gain the initiative, played an important role in some blockades.

22) The ability of the blockading force to utilize swiftness, contributed to the success of some blockades.

23) Block ships, designed to be sunk in a channel to prevent ships from entering or leaving port, did not work.

FUTURE TRENDS

As discussed in Chapter Five, aircraft and submarines have played increasingly important roles in both establishing and challenging blockades. This will also be true in future blockade operations. The Cuban Missile Crisis, for example, clearly demonstrated that a combined arms force of aircraft, submarines and surface ships is required to make or break a contemporary blockade. In

essence, this means that in future blockades, local air superiority and sea control will be essential.

The carrier battle group, with attack submarines in direct support [SSN (DS)], is the only asset capable of providing such a combined arms force with organic assets. A Surface Combatant Task Group (SCTG), formed around a battleship, will be able to fulfill this role successfully only if it is strongly supported by substantial land based aircraft. The Tomahawk missile, an asset of the battleship SCTG, provides some of the capabilities which were historically provided only by tactical aircraft.(1) However, manned aircraft will be needed by a blockading force to intercept, escort or engage aircraft entering a blockade zone. The addition of more platforms equipped with the Aegis total weapons system, will give carrier battle groups greater ability to conduct surveillance and interception of potential blockade breechers.

Anti-Submarine Warfare (ASW) is a key area which will continue to grow in importance to the protection of a blockading force. New advancements in ASW technology must continue to be developed and integrated into units comprising and supporting the carrier battle group.

As mentioned previously, operations conducted ashore in conjunction with the naval blockade are essential to the success of the blockade. The capability now possessed by the Marine Amphibious Brigade (MAB) with its associated Maritime Prepositioning Ships (MPS) adds a great deal of

flexibility to a blockading force. By merely placing these MPS ships with the blockading force, the imminent threat of invasion becomes substantial. This could lead to the realization of blockade objectives without putting forces ashore.

A noticeable trend in the last fifty years, is the impact of public opinion and national will on decisions to implement blockades. This will continue to play an important role in future blockades. In the Secretary of Defense's Annual Report to the Congress for Fiscal Year 1987, six major tests are outlined which can be applied when the United States is considering committing U.S. forces to combat. These six tests can also be applied to decisions to commit forces for a blockade and can assist in determining issues of public opinion and national will. These six tests, as described by the Secretary of Defense, are:

- 1) The United States should not commit forces to combat unless our vital interests are at stake. Our interests, of course, includes interests of our allies.

- 2) If the United States decides that it is necessary to commit its troops to combat in a specific situation, we must commit them in sufficient numbers and with sufficient support to win. If we are unwilling to commit the forces or resources necessary to achieve our objectives, or if the objective is not important enough, we should not commit our forces.

- 3) If we do decide to commit forces to combat, we must have clearly defined political and military objectives. Unless we know precisely what we intend to achieve by fighting, and how our forces can accomplish those clearly defined objectives, we cannot formulate or size forces properly, and we should not commit our forces at all.

4) The relationships between our objectives and the forces we have committed -- their size, composition, and disposition -- must be continually reassessed and adjusted as necessary. In the course of a conflict, conditions and objectives inevitably change. When they do, so must our combat requirements. We must continuously keep as a beacon light before us the basic questions: Is a vital U.S. interest at stake? Have we committed forces and resources sufficient for victory? Are our objectives clearly defined? If the answers are "yes," then we should continue to fight. If the answers are "no," then we should not be in combat. We must never again commit U.S. forces to a war we do not intend to win.

5) Before the United States commits combat forces abroad, the U.S. government should have some reasonable assurance of the support of the American people and their elected representatives in the Congress. Such assurance cannot be provided by a public opinion poll. The public elects a President as a leader, not a follower. He takes an oath to protect and defend the Constitution. The people also expect a Congress sworn to the same principles and duties. To that end, the President and the leadership of the Congress must build the public consensus necessary to protect our vital interests. Sustainability of public support cannot be achieved unless the government is candid in making clear why our vital interests are threatened, and how, by the use of American military troops, we can achieve a clear, worthy goal. U.S. troops cannot be asked to fight a battle with the Congress at home, while attempting to win a war overseas. Nor will the American people sit by and watch U.S. troops committed as expendable pawns on some grand diplomatic chessboard.

6) Finally, the commitment of U.S. forces to combat should be a last resort -- only after diplomatic, political, economic and other efforts have been made to protect our vital interests.(2)

The impact of technology has played a significant role in past blockades. It will indeed play a role in those conducted in the future. One key area which will impact on the success of future blockading forces is the ability to defend that force against anti-ship missiles. The dramatic role that these missiles played against British ships in the Falklands crisis highlights the importance of this aspect.

Although these ships were not actually conducting a blockade, they were operating in coastal waters in much the same manner as ships employed in a blockade. The sinking of ships by Exocet missiles off the Falklands, in the view of the author, was caused primarily by the lack of Air Early Warning (AEW) capability and the use of short ranged VSTOL aircraft in roles as fighters and Combat Air Patrol (CAP) aircraft. The use of E-2C or E-3A aircraft, as used by American carrier battle groups to warn against and direct intercept of approaching launch platforms, could have substantially reduced British losses. Additionally, the substantial increase in combat range and time on station afforded to the F-14, over that of the AV-8B Harrier, would have given the British a much better opportunity to intercept Argentine aircraft at longer ranges. As a result, more Argentine aircraft would have been lost prior to reaching weapons release range.

These technological capabilities will be important to the carrier battle group operating as a blockading force. The ability to counter an attack by aircraft and missiles will be vital to the survival of the blockading force and these capabilities must continue to be developed. The introduction of the Anti-Air Warfare (AAW) capability of the Ticonderoga class cruiser equipped with the Aegis weapons system, represents a dramatic step forward in this direction.

In the past, the blockade was principally imposed against harbors, bays or narrow straits. In studying the importance of choke points to the aspect of sea control, the possibility exists to apply some elements of successful blockades to the closing of choke points. This concept might directly apply to those controlling access to such areas as the sea of Japan.

Although deception has been used effectively in past blockades, its role was not extensive. In the future, the requirements to protect the carrier battle group acting as a blockading force will require more widespread use of deception. Hiding or masking the battle group through electronic, visual and acoustic means will play a critical part in the force's survivability and success. Deception will also add to the element of surprise. If a potential blockade runner is unsure of the positions of the blockading force, it is more difficult for him to determine routes that will evade that force. The blockade runner's degree of risk is therefore heightened. Deceiving the enemy about the true size and composition of the blockading force will also add to this risk. By merely thinking that a submarine is operating in the vicinity of a harbor entrance, an enemy may decide not to risk entrance or escape. This deception may be used effectively even when a submarine is not actually on station.

International law will continue to influence the imposition of blockades. The United Nations Charter, along

with the 1958 Geneva Convention on freedom of the seas, virtually eliminate belligerent rights in a blockade.(3) As a result, this has reduced the legal options for the use of military force in response to international problems and crises.

This issue will also continue to be clouded by the United States' firm stance concerning the rights of neutrals and protection of freedom of the seas. This will be particularly critical in the near future in light of current problems associated with the potential search and seizure of American shipping by belligerents in the Persian Gulf War and American resolve to prevent it.

The key principal, which implies that the nation holding the greatest sea power interprets and adheres to international maritime law in accordance with its vital interests, will continue to apply. In dealing with situations not involving a declaration of war, blockade operations will take on more subtle forms. This will include wider use of quarantines instead of blockades. It will also involve the use of combined blockading forces such as a United Nations force. For example, one possibility for dealing with problems in Central America would be to form a regional force consisting of naval units from members of the Organization of American States (OAS).

Future blockade operations will consist of both distant and close blockades. Because of the widespread use of distant blockades in this century, the legal requirement

for a blockade to be close to be effective will no longer be adhered to. Additionally, the concept of "continuous voyage" will also see greater use.

Although this study was primarily written from the viewpoint of implementing a blockade, it can also be considered from the perspective of a nation which seeks to prevent a blockade from being imposed against it. Considering that the United States is both a maritime power and basically an island nation, it is important that it be viewed from both angles.

SUMMARY

The naval blockade has been used throughout history from the fifth century B.C., until the last recorded blockade in 1973. Through analyzing these past blockades, this study has sought to identify those factors that contributed to the success of past naval blockades. A total of 22 common criteria and 23 secondary criteria were identified which merit consideration in implementing future blockades. Of these criteria, two were found to exist in virtually all successful blockades. History has shown that there is no substitute for superior sea power. Additionally, the blockader who does not employ operations ashore, in conjunction with the blockade, has virtually no potential for success.

The naval blockade has been used as a tool to deal with situations ranging from total war to low intensity conflicts. Although the implementation of a blockade

becomes more difficult with continued advances in naval technology, its potential for future use cannot be dismissed.

ENDNOTES

(1) S. J. Froggett, CDR, USN, "The Maritime Strategy: Tomahawk's Role," U.S. Naval Institute Proceedings, Vol. 113, No. 2 (Annapolis, MD: U.S. Naval Institute, 1987), pp. 51-54.

(2) Secretary of Defense, Annual Report to the Congress Fiscal Year 1987 (Washington, D.C.: Department of Defense, 1986), pp. 78-79.

(3) D. P. O'Connell, The Influence of Law on Sea Power (Annapolis, MD: Naval Institute Press, 1975), pp. 114-115.

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